

Building Healing Behavioral Health Systems:

Trauma-Informed/Healing-Centered Organizational Transformation

Adverse and Positive Childhood Experiences among Middle School Students in Behavioral Health Populations



Behavioral Health Administration & Universities Partnership



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Maryland Childhood Trauma and ACEs

The following data is available due to the efforts of:

- The Maryland Department of Health: Prevention and Health Promotion Administration Center for Tobacco Prevention and Control
- The Maryland youth who participated in the surveys used in this project

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- Summary of Behavioral Health Findings
- Potential Action Steps



Building Healing Behavioral Health Systems:

Adverse Childhood Experiences and
Positive Childhood Experiences Background



What are Adverse Childhood Experiences?

ACE Overview

Childhood exposure to physical, emotional, or sexual abuse, neglect, and other stressors are known as adverse childhood experiences (ACEs)

- Experiencing violence, abuse, or neglect
- Witnessing violence
- Experiencing household substance misuse
- Experiencing household mental health problems
- Instability in the home (parental separation/divorce or household members in jail or prison)

What are Adverse Childhood Experiences?

ACE Surveys

Household ACEs

Kaiser-Permanente^a

1. Emotional Abuse
2. Physical Abuse
3. Sexual Abuse
4. Emotional Neglect
5. Physical Neglect
6. Parental Separation or Divorce
7. Household Domestic Violence
8. Household Substance Abuse
9. Household Mental Illness
10. Household Incarceration

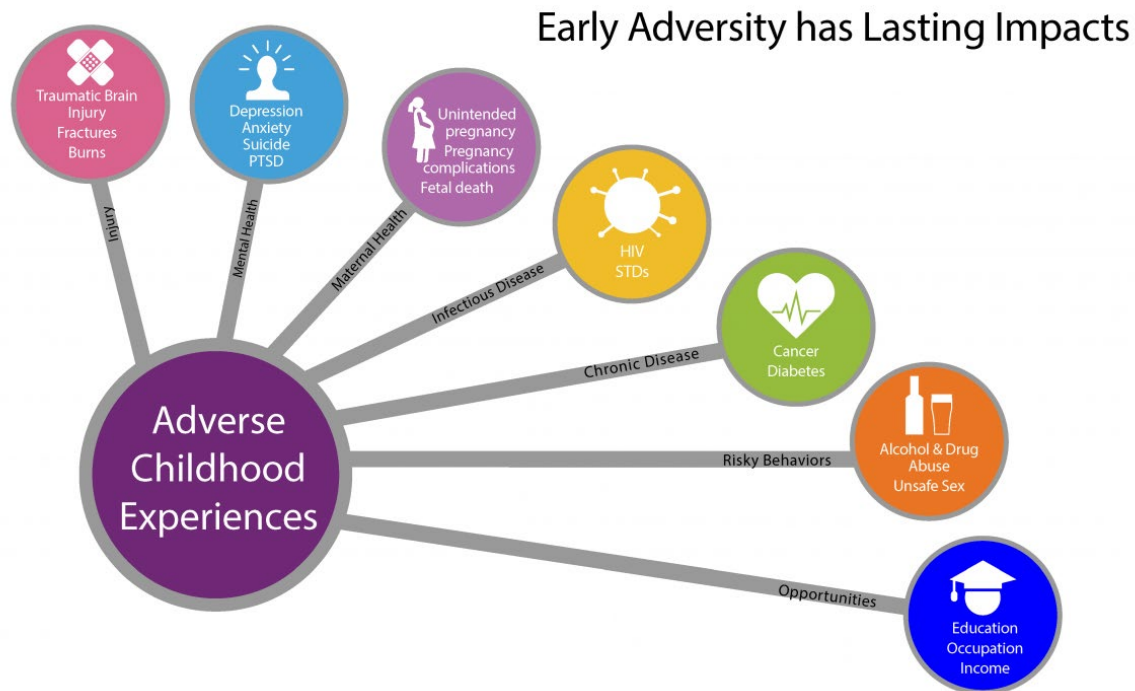
Community ACEs

Philadelphia Urban Expansion^b

1. Witnessed Violence
2. Felt Discrimination
3. Adverse Neighborhood Experience
4. Bullied
5. Lived in Foster Care

What are Adverse Childhood Experiences?

Negative Effects of ACEs



ACEs are linked to chronic health problems, early mortality, mental health problems, and substance use in adulthood.

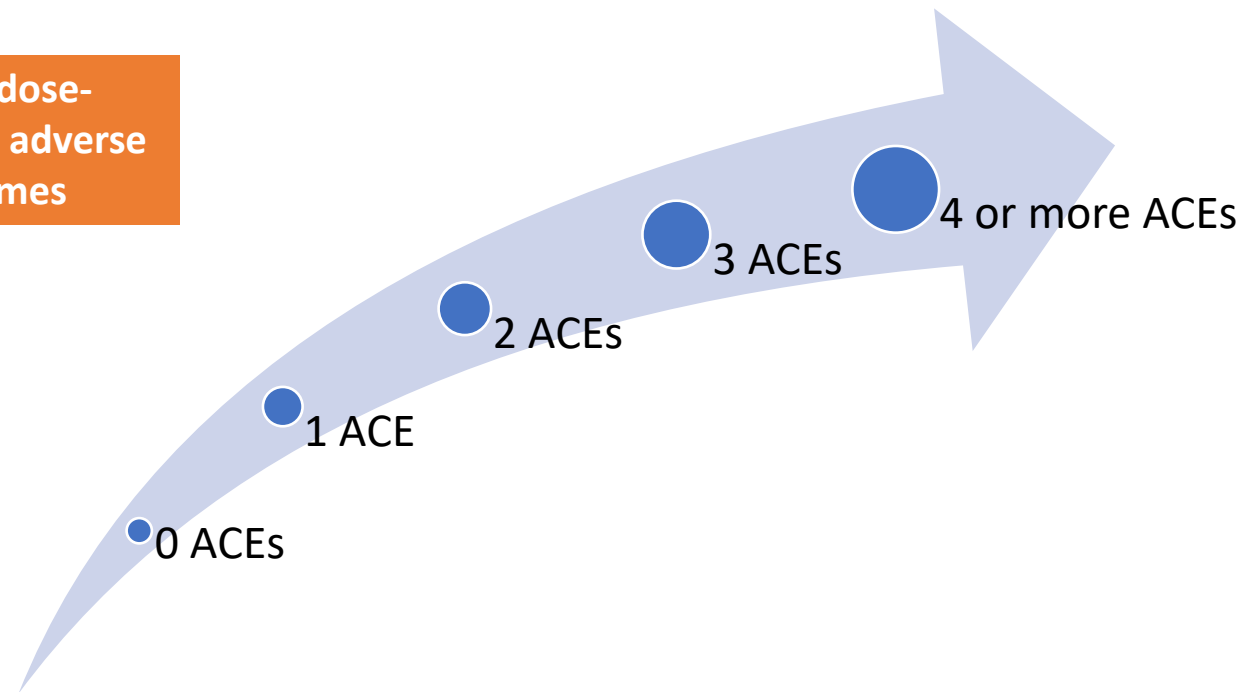
ACEs contribute to increased frequency of:

1. Reaction to Severe Stress and Adjustment (including PTSD)
2. Depression
3. Anxiety
4. Psychosis
5. Substance Use (Alcohol, Cannabis, Opioid, Other substance use)

What are Adverse Childhood Experiences?

Dose-Response Relationship

ACEs have been found to have a dose-response relationship with many adverse risk behaviors and disease outcomes



Positive Childhood Experiences

1. Being able to talk openly to a family member or as a family about feelings and feel heard, accepted and supported.
2. Belief that family stood by them during difficult times.
3. Feeling safe and protected by an adult in the home.
4. Feeling supported by friends.
5. Having a sense of belonging and connection with a larger group who has “got your back” (e.g. school, church, clubs, neighborhood, etc.).
6. Enjoyment of participation in community traditions.
7. Relationship with at least one non-parent adult who takes genuine interest in you.

Positive childhood experiences show a dose-response relationship with adult depression and/or poor mental health, as well as adult-reported social and emotional support



Building Healing Behavioral Health Systems:

Key Take Aways



Key Take Aways



- **More students with behavioral health challenges experience all ACEs than students without behavioral health challenges.**
- **Positive Childhood Experience mitigate the impact of ACEs** on behavioral health challenges by 11-71% and are associated with reducing risk from specific ACEs by 15-73%
- **Having three or more ACEs is associated with increased behavioral health risks for**
 - Mental health indicators, such as depression or suicide attempt (6.2-7.9 times)
 - Current alcohol or marijuana use (5.0-8.6 times) and
 - Ever misusing pain medication (4.0 times) or cocaine (4.0 times)

Key Take Aways



Specific ACEs are associated with increased risk for:

- **Mental Health Challenges** (2.3 – 6.3 times)
 - Increased risk for Mental Health Challenges are most associated with Emotional Abuse (5.0-6.3 times) and Household Mental Illness (4.6-4.7 times)
- **Current Alcohol Use or Marijuana use** (1.3-4.8 times)
 - Increased risk for Current Alcohol Use is most associated with Household Substance use (3.5 times)
 - Increased risk for Current Marijuana Use is most associated with Household Incarceration (4.8 times) and Household Substance Use (4.7 times)
- **Ever using other illicit substances** (1.2-3.8 times)
 - Increased risk for ever misusing pain medication is most associated with Household Emotional Abuse (3.4 times)
 - Increased risk of trying cocaine is most associated with Household Incarceration at 3.8 times



Building Healing Behavioral Health Systems:

Focused Data Study Methods



Focused Data Studies

- Focused Data Studies aim to describe and contextualize the prevalence of childhood trauma and ACEs in the State of Maryland Public Behavioral Health System, with two studies planned each year.
 - Study 1 used publicly available aggregated data to compare Maryland and Nationwide prevalence for youths and adults.
 - Study 2 performed a “deeper dive” into data for Maryland’s high school youth.
 - Study 3
 - Enables a “deeper dive” into Maryland’s middle school youth data (this report).
 - Includes analyses of ACE-like experiences among Maryland’s middle school and high school youth (separate report available).
 - Study 4 (planned) will enable a “deeper dive” into data for Maryland’s adults.

Methods: Data Source

- 2021 Middle School and High School Youth Risk Behavior Survey/Youth Tobacco Survey (YRBS/YTS)
- Maryland collaborates with the Centers for Disease Control and Prevention (CDC) to collect behavioral risk data through school systems using different surveys for middle-school and high-school students.
- Data received from the Maryland Department of Health: Prevention and Health Promotion Administration Center for Tobacco Prevention and Control.

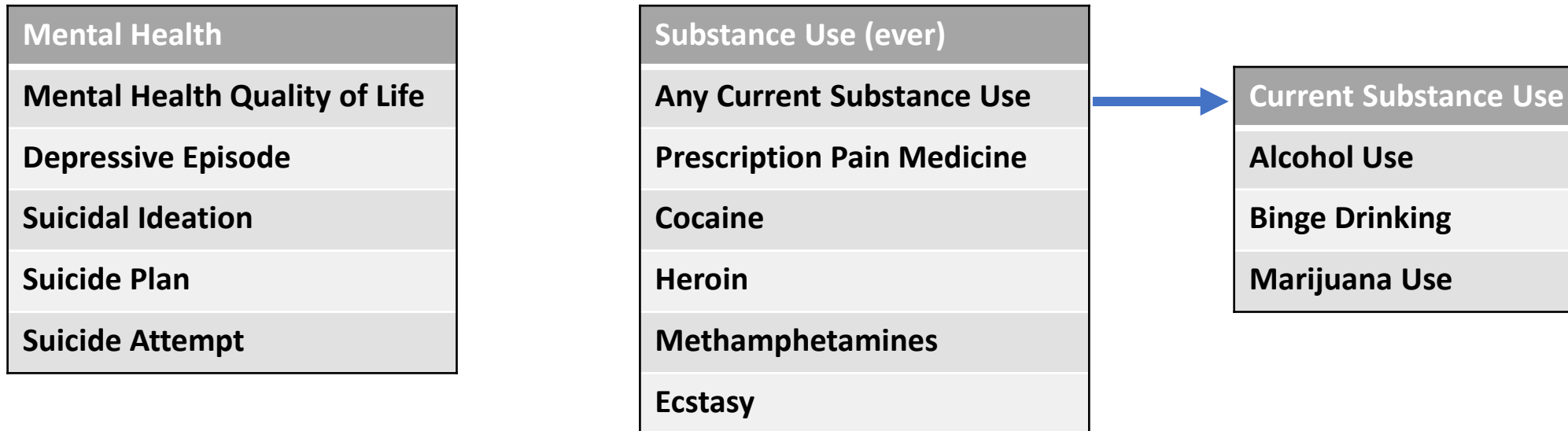
Methods: Sample

- The Positive Childhood Experiences (PCEs) analysis only includes students with behavioral health challenges, to best explore the impact of PCEs on these individuals.
- The remainder of the analyses includes all students to best understand the impact of each ACE across behavioral health indicators for individuals with behavioral health challenges compared to those without.
- All findings reported in this analysis are statistically significant unless otherwise stated.

Methods: Defining Concepts in the Data

- This analysis aims to understand the relationship of ACEs and PCEs with Mental Health and Substance Use Indicators.
- Several YRBS/YTS questions were assessed for each area of analysis: ACEs, PCEs Mental Health and Substance Use
- The methods section at the end of this slide deck includes operational definitions and criteria for each ACE and PCE

Methods: Identifying Individuals with Behavioral Health Challenges



Methods: Defining Behavioral Health

Mental Health Challenges: Individuals meeting any of the criteria below

Category	Question	Response
Mental Health Quality of Life	During past 30 days, how often was your mental health not good? (Poor mental health includes stress, anxiety, and depression.)	“Most of the Time” or “Always”
Depressive Episode	During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?	“Yes”
Suicidal Ideation	Have you ever seriously consider attempting suicide?	“Yes”
Suicide Plan	Have you ever made a plan about how you would attempt suicide?	“Yes”
Suicide Attempt	Have you ever tried to kill yourself?	“Yes”

Methods: Defining Behavioral Health

Current Substance Use: Individuals meeting any of the criteria below

Category	Question	Response
Alcohol Use	During the past 30 days, on how many days did you have at least one drink of alcohol?	“One or more days”
Marijuana Use	During the past 30 days, how many times did you use marijuana?	“One or more days”

Substance Use Ever: Individuals meeting current substance use or any of the criteria below

Category	Question	Response
Prescription Pain Medicine	Have you ever taken prescription pain medicine without a doctor's prescription or differently than how a doctor told you to use it?	“Yes”
Cocaine	Have you ever used any form of cocaine, including powder, crack, or freebase?	“Yes”

Methods: ACEs available for Analysis

ACE Surveys

Household ACEs

Kaiser-Permanente^a

1. Emotional Abuse
2. Physical Abuse
3. Sexual Abuse
4. Emotional Neglect
5. Physical Neglect
6. Parental Separation or Divorce
7. Household Domestic Violence
8. Household Substance Abuse
9. Household Mental Illness
10. Household Incarceration

Community ACEs

Philadelphia Urban Expansion^b

1. Witnessed Violence
2. Felt Discrimination
3. Adverse Neighborhood Experience
4. Bullied
 1. Bullied at School
 2. Electronic Bullying
5. Lived in Foster Care

Indicates Items Available for Analysis in the Maryland YRBS/YTS data

^aFelitti, et al., (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ace) study. *American Journal of Preventive Medicine*, 14(4), 245–258.

^bSource: [FindingsfromPhiladelphiaACESurveyandComparedACEQuestions.pdf](#)

Methods: Identifying ACEs

- The original Kaiser ACE questions asked if individuals ever experienced each ACE with response options of Yes or No
- ACEs are counted in the YRBS/YTS under the following conditions:

ACE	YRBS/YTS Options	ACE counted if
<ul style="list-style-type: none">• Emotional Abuse	Never Rarely Sometimes Most of the Time Always	Most of the time Always
<ul style="list-style-type: none">• Household Substance Use• Household Mental Illness• Household Incarceration• Witnessed Community Violence• Bullied at School• Electronic Bullying	Yes No	Yes

Methods: ACE Count Threshold for Adverse Health Outcomes

- The original 10-item Kaiser-Permanente ACE study found that an ACE count of 4 or more ACEs is implicated in poor health outcomes in adulthood
- The YRBS/YTS for Middle School only collects 4 of the original Kaiser-Permanente ACEs, and 3 from the Philadelphia study
- Only the 4 Kaiser-Permanente items in the ACE counts for this analysis.
- Because fewer ACE items are collected in the YRBS/YTS, this analysis uses an ACE count of 3 or more ACEs as a threshold for increased poor outcomes in adulthood.

Methods: PCEs available for Analysis

Positive Childhood Experiences

1. Being able to talk openly to a family member or as a family about feelings and feel heard, accepted and supported.
2. Belief that family stood by them during difficult times.
3. Feeling safe and protected by an adult in the home.
4. Feeling supported by friends.
5. Having a sense of belonging and connection with a larger group who has “got your back” (e.g. school, church, clubs, neighborhood, etc.).
6. Enjoyment of participation in community traditions.
7. Relationship with at least one non-parent adult who takes genuine interest in you.

PCE-like Experiences in YRBS/YTS

1. Participation in Extracurricular Activities at school such as sports, band, drama, clubs, or student government.
2. Feeling safe at school and on your way to or from school.
3. Having Food Security:
 1. Not worried that your food would run out before you got money to buy more.
 2. Did not run out of food when your family did not have the money to buy more.

Indicates Items Available for Analysis in the Maryland YRBS/YTS data

Methods: Measurement of Increased Risk

- Analysis included measuring the increased risk of having each ACE or decreased risk of each PCE with each behavioral health category
- Risk is measured by an odds ratio that indicates how many times more or less likely individuals are to have a specified ACE and behavioral health category
- The risks in this report are **not causal, they are associations**. For example, when discussing mental health and a specific ACE
 - **SAY**: There is a relationship between having experienced an ACE and experiencing mental health challenges
 - **NOT**: Experiencing an ACE causes mental health challenges

Methods: Caveats

- The YRBS/YTS uses 3 or more ACEs (of 4 collected) as a threshold for implications in adult health outcomes instead of the traditional 4 or more ACEs (of the 10 collected) by Kaiser-Permanente. As a result, findings on high ACE counts may or may not be comparable to other, publicly- available research.
- Some adverse outcomes for ACEs may not surface until later adolescence or adulthood. This report includes data collected from middle school students. Because individuals may develop mental health or substance use issues after middle school, the proportions for behavioral health outcomes will likely increase during adolescence and into adulthood.



Building Healing Behavioral Health Systems:

Positive Childhood Experiences (PCEs) among Individuals with Behavioral Health Challenges



Impact of Positive Childhood Experiences

- PCEs can counteract the impact of ACEs
- Research comparing adults with high numbers of PCEs to those who reported low or no PCEs. Adults reporting more PCEs:
 - had 72 percent lower levels of adult depression and/or poor mental health
 - were 3.5 times more likely to get the social and emotional support they need as an adult (Bethell, et al, 2019)
- When parents share ideas and talk about things that matter with their child, the child had a 1,200 percent greater chance of flourishing compared to those who did not have this type of communication (Bethell, Gombojav & Whitaker, 2019).

Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample. *JAMA Pediatrics* published online 2019 Sep 9.

Bethell, C. D., Gombojav, N., & Whitaker, R. C. (2019). Family resilience and connection promote flourishing among US children, even amid adversity. *Health Affairs*, 38(5), 729-737.

Positive Childhood Experiences source: <https://www.childandadolescent.org/positive-childhood-experiences/>

Impact of Positive Childhood Experiences

- PCEs can come from the family; however, some children live in homes where they don't feel emotionally safe. PCEs involving friends and communities can counterbalance the effect of ACEs, even if household PCEs are not available.

Household PCEs

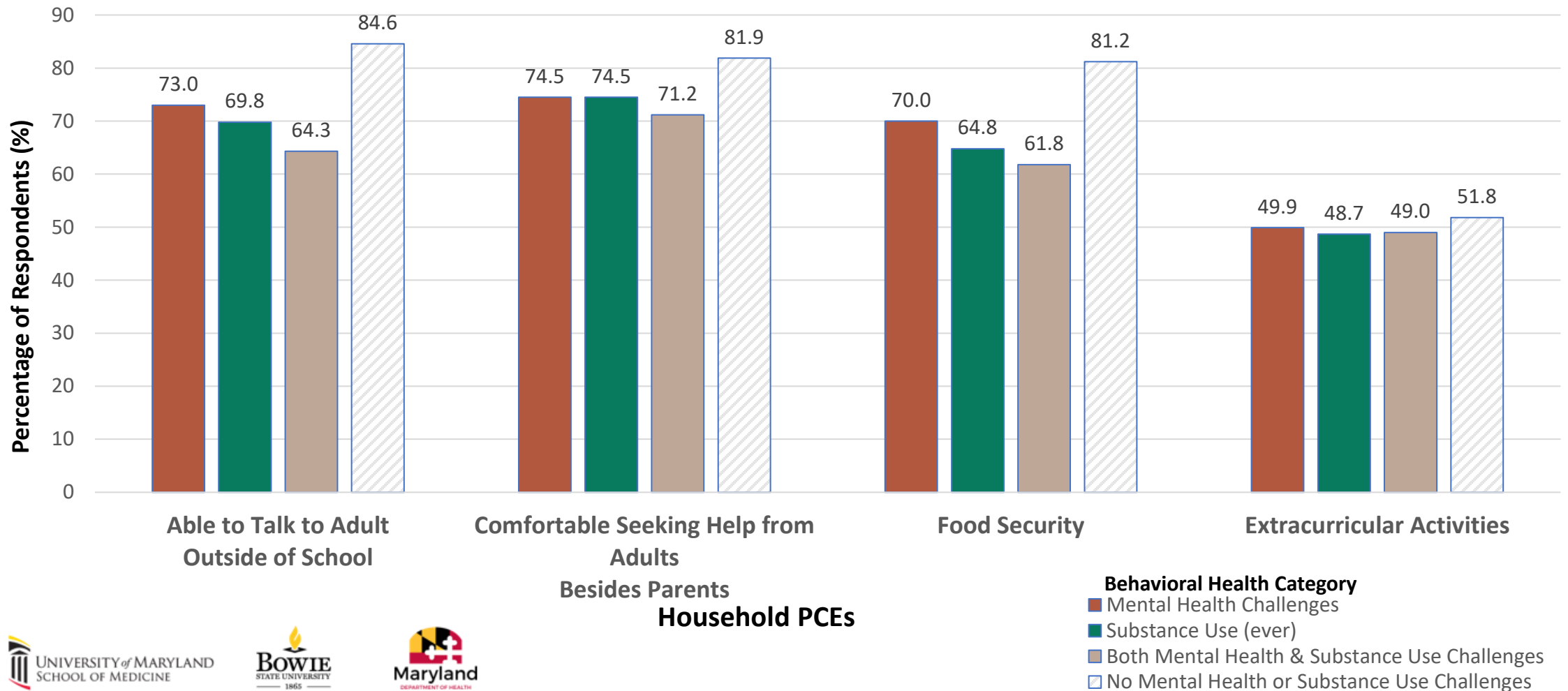
- Being able to talk openly to a family member or as a family about feelings and feel heard, accepted and supported.
- Belief that family stood by them during difficult times.
- Feeling safe and protected by an adult in the home.

Community PCEs

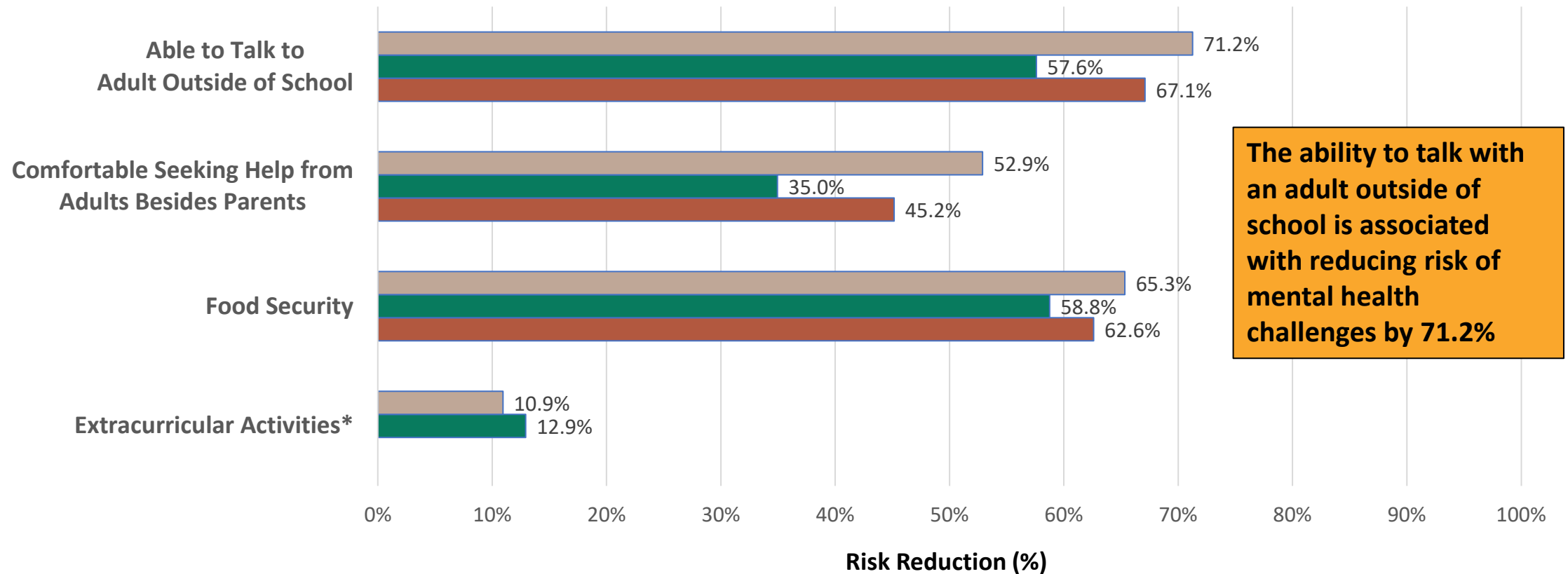
- Feeling supported by friends.
- Having a sense of belonging and connection with a larger group who has “got your back” (e.g. school, church, clubs, neighborhood, etc.).
- Enjoyment of participation in community traditions.
- Relationship with at least one non-parent adult who takes genuine interest in you.

Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample. *JAMA Pediatrics* published online 2019 Sep 9. Positive Childhood Experiences source: <https://www.childandadolescent.org/positive-childhood-experiences/>

PCEs and Behavioral Health Challenges



PCEs associated with reduced risk with Behavioral Health

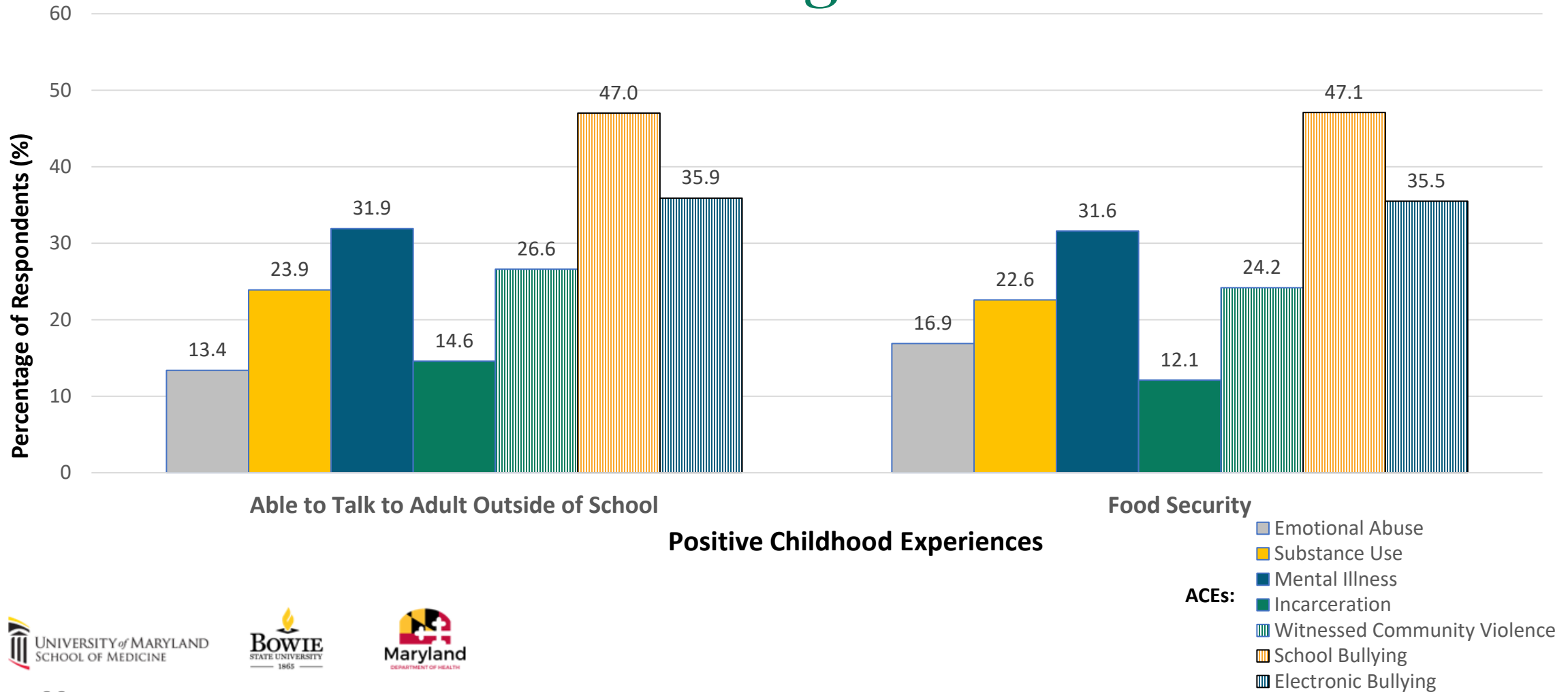


The ability to talk with an adult outside of school is associated with reducing risk of mental health challenges by 71.2%

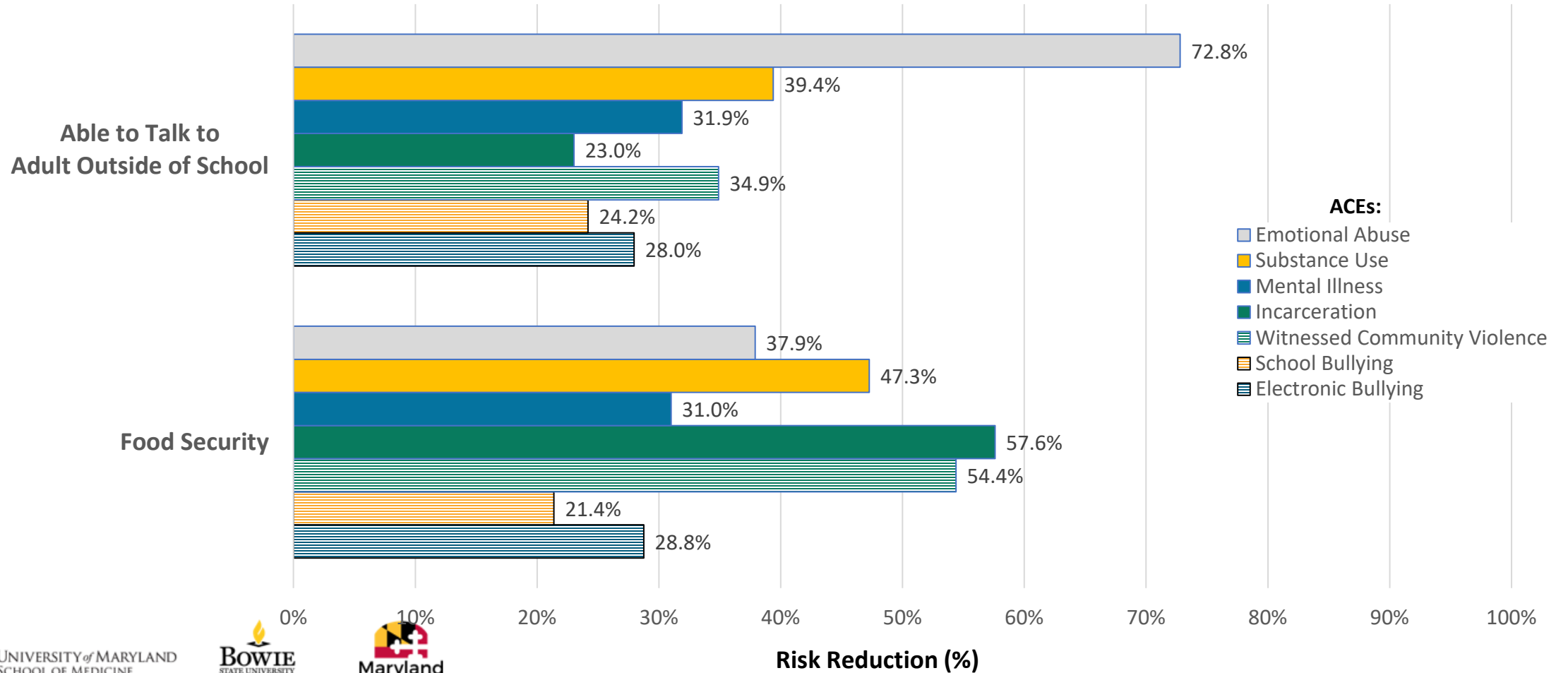
* Extracurricular Activities not statistically significant for Mental Health and Substance Use Challenges

Behavioral Health Category
 ■ Mental Health Challenges
 ■ Substance Use (ever)
 ■ Mental Health and Substance Use Challenges

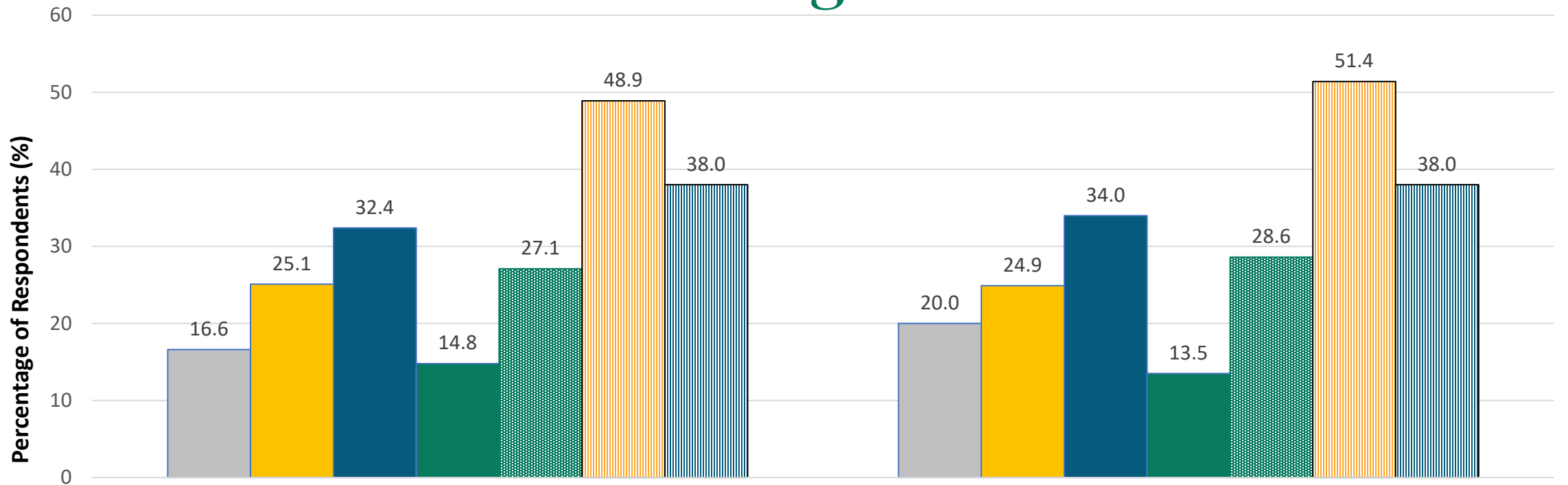
Household PCEs and ACEs in individuals with Behavioral Health Challenges



PCEs associated with reduced risk with Household ACEs in Behavioral Health Population



Community PCEs and ACEs in individuals with Behavioral Health Challenges



Comfortable Seeking Help from Adults Besides Parents

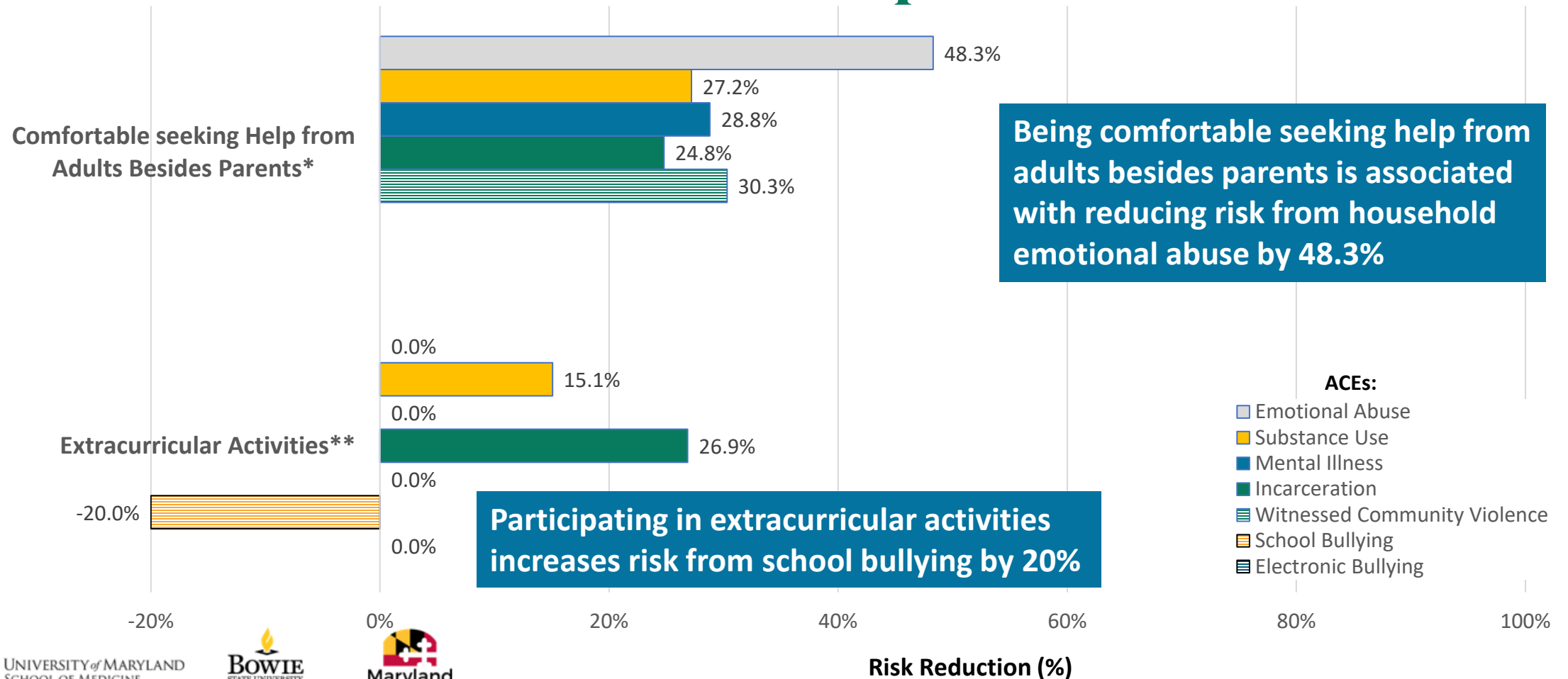
Extracurricular Activities*

Positive Childhood Experiences

- ACEs:
- Emotional Abuse
 - Substance Use
 - Mental Illness
 - Incarceration
 - Witnessed Community Violence
 - School Bullying
 - Electronic Bullying

* Extracurricular activities not statistically significant for emotional abuse, household mental illness, witnessing community violence or electronic bullying

PCEs associated with reduced risk with Community ACEs in Behavioral Health Population



Participating in extracurricular activities increases risk from school bullying by 20%

Being comfortable seeking help from adults besides parents is associated with reducing risk from household emotional abuse by 48.3%

* Comfortable seeking help from adults besides parents not statistically significant for school or electronic bullying.

** Extracurricular activities not statistically significant for emotional abuse, household mental illness, witnessing community violence or electronic bullying

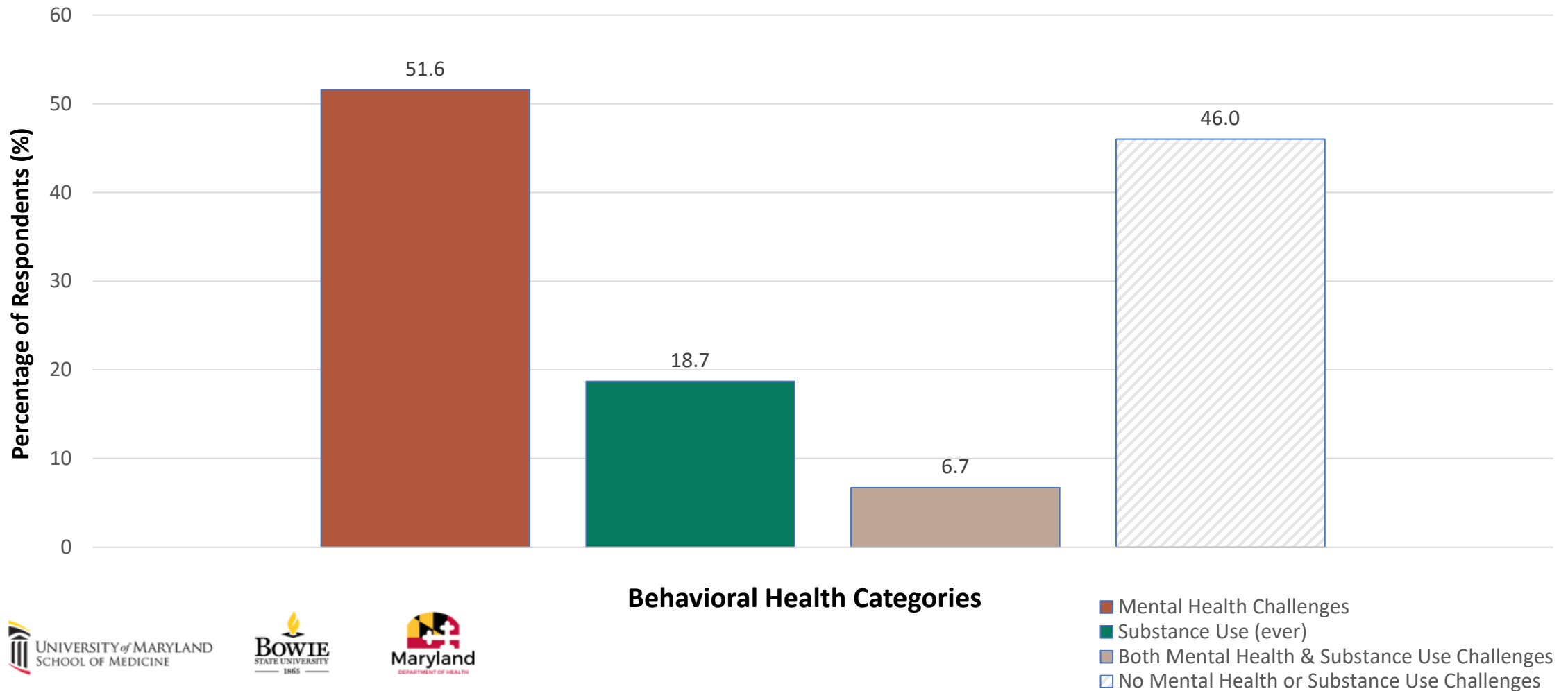


Building Healing Behavioral Health Systems:

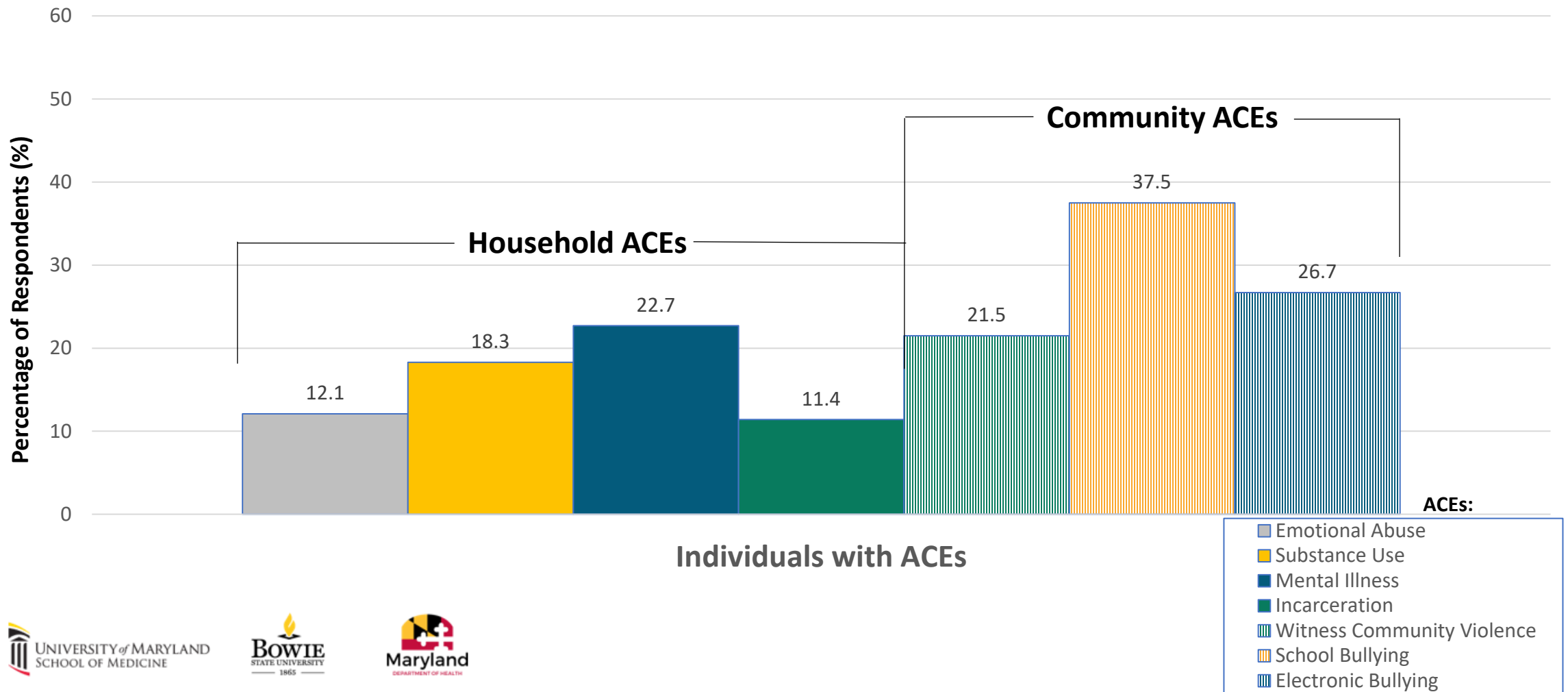
Behavioral Health Categories and Adverse Childhood Experiences



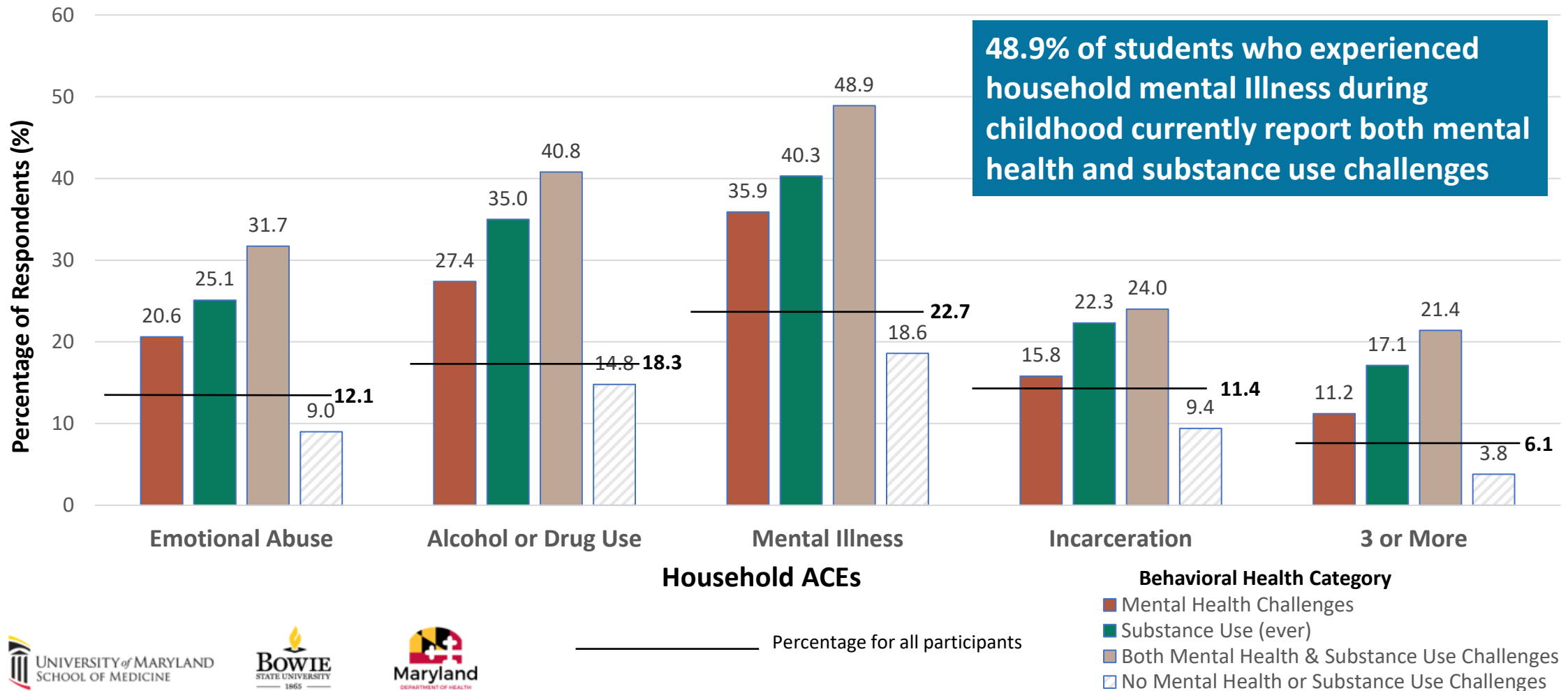
Behavioral Health among Middle School Students



ACEs among Middle School Students



Household ACEs and Behavioral Health



3+ ACEs and Behavioral Health

Individuals with 3+ ACEs are more likely to experience behavioral health challenges

9.5 times more likely to experience mental health challenges

11.2%

MH

1.3%

No
MH

Mental Health Challenges

5.3 times more likely to ever use substances

17.1%

SU

3.7%

No
SU

Substance Use (ever)

6.8 times more likely to use substances and experience mental health challenges

21.4%

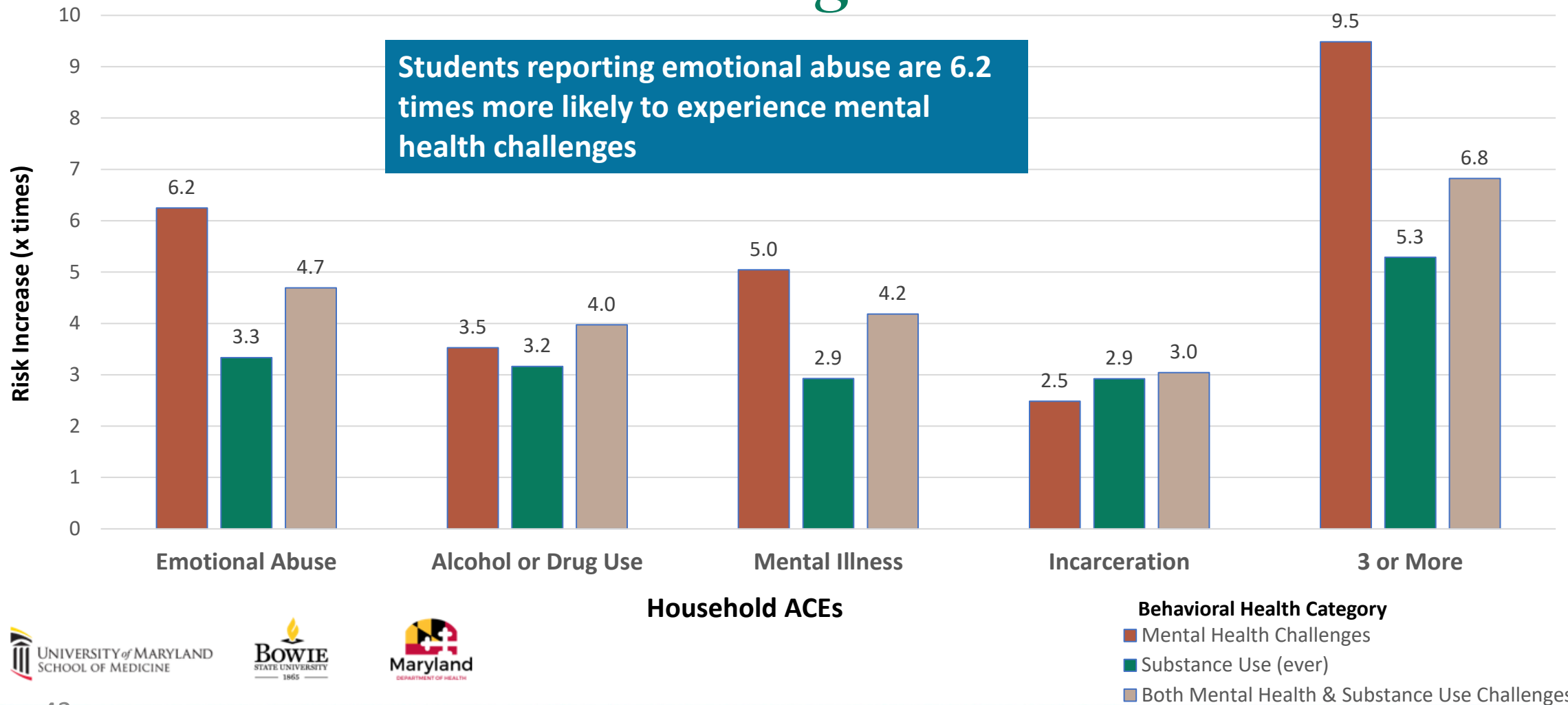
MH
& SU

3.8%

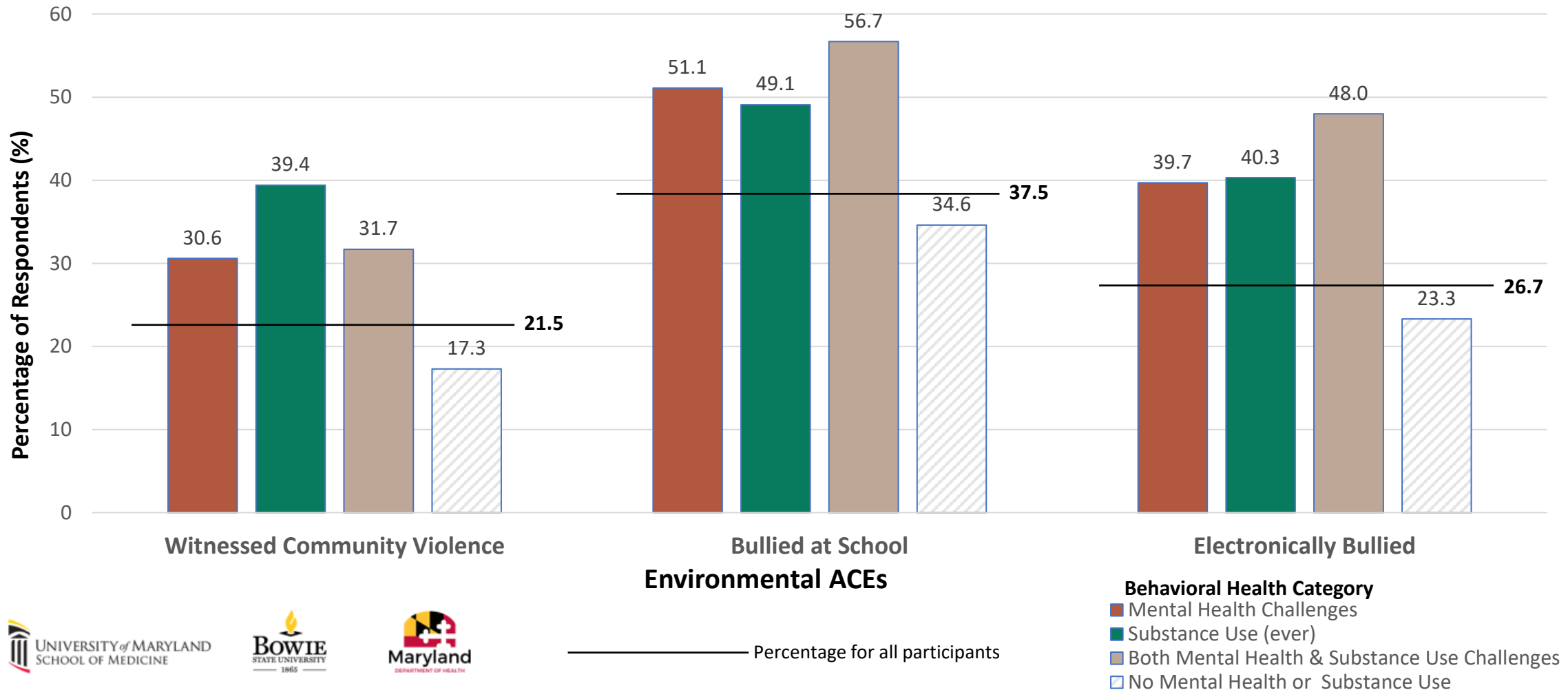
No
MH
& SU

Both Mental Health and Substance Use Challenges

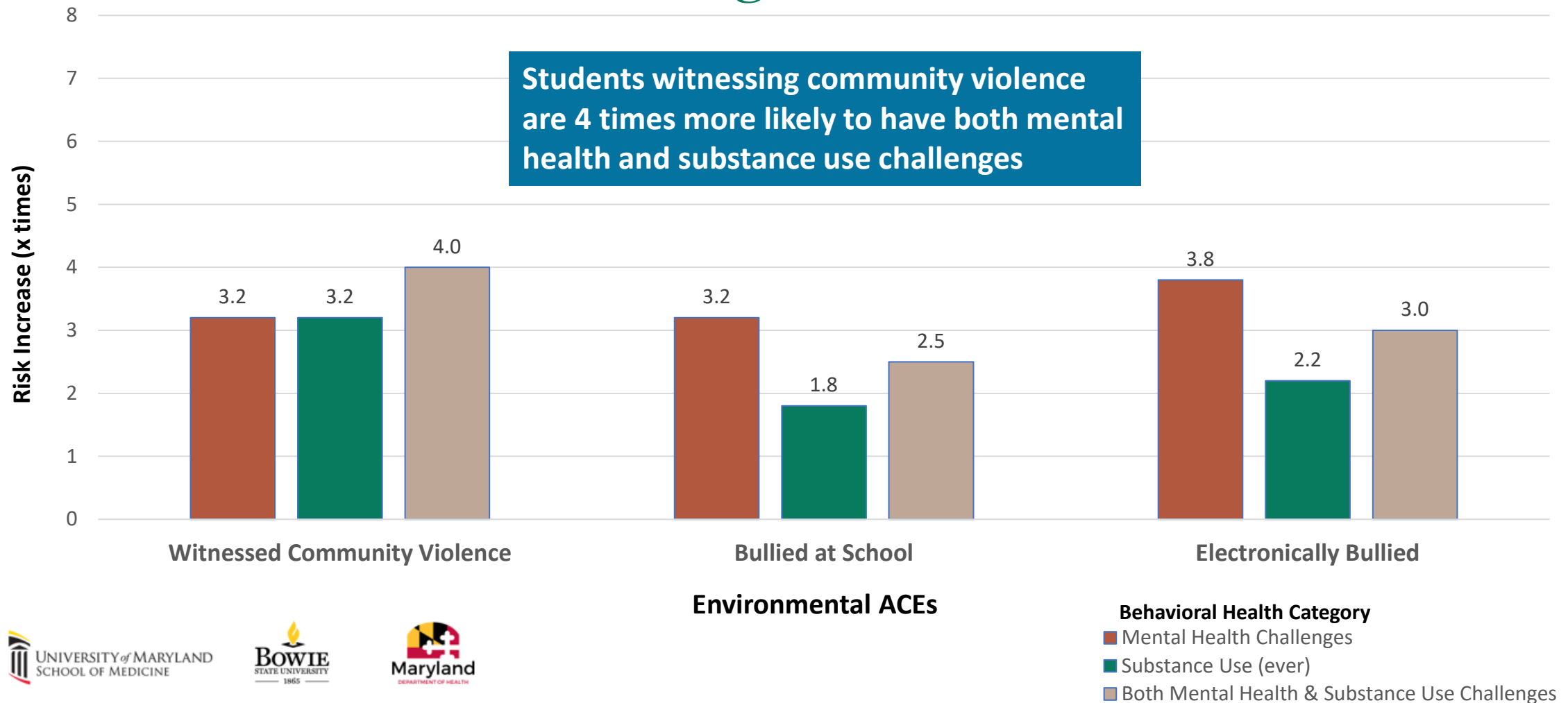
Household ACEs Increase Risk of Behavioral Health Challenges



Community ACEs and Behavioral Health



Community ACEs associated with Increased Risk with Behavioral Health Challenges



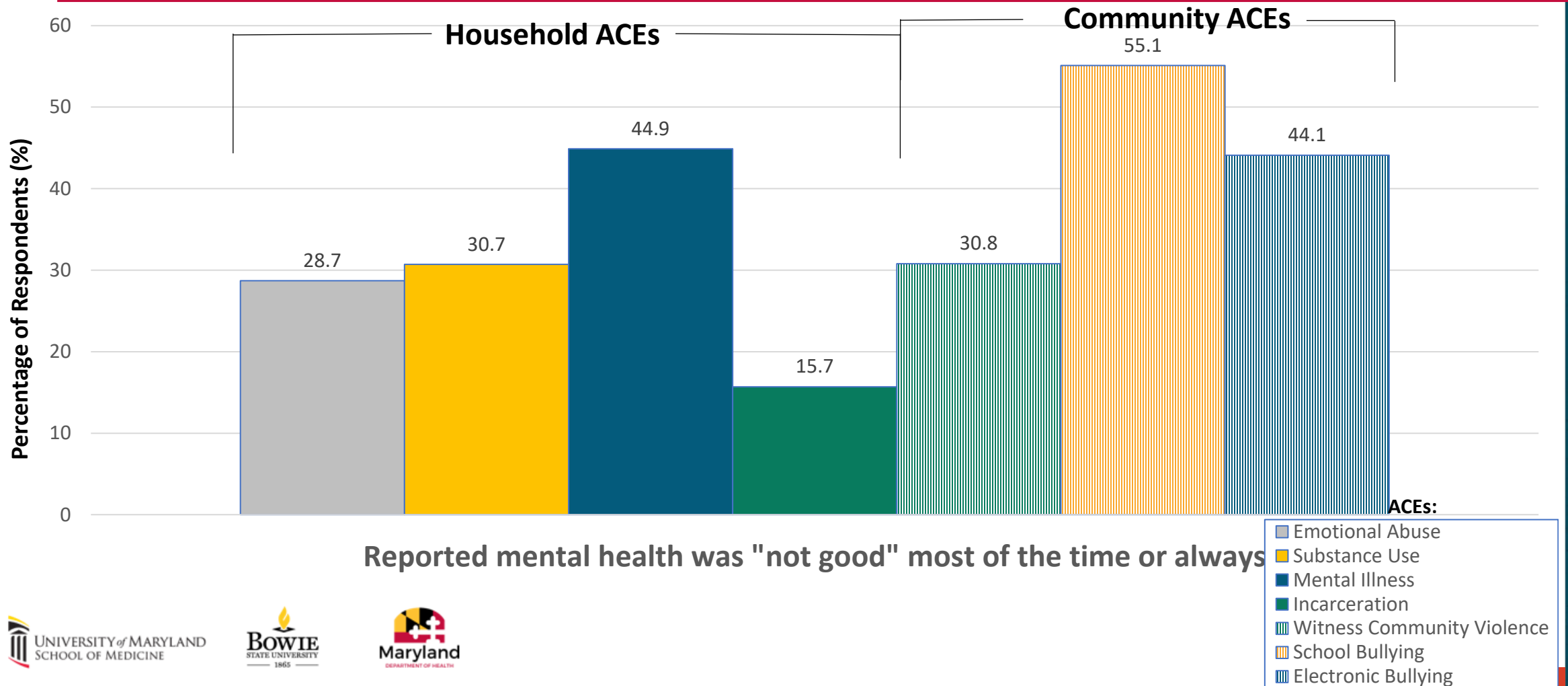


Building Healing Behavioral Health Systems:

Mental Health Indicators and
Adverse Childhood Experiences

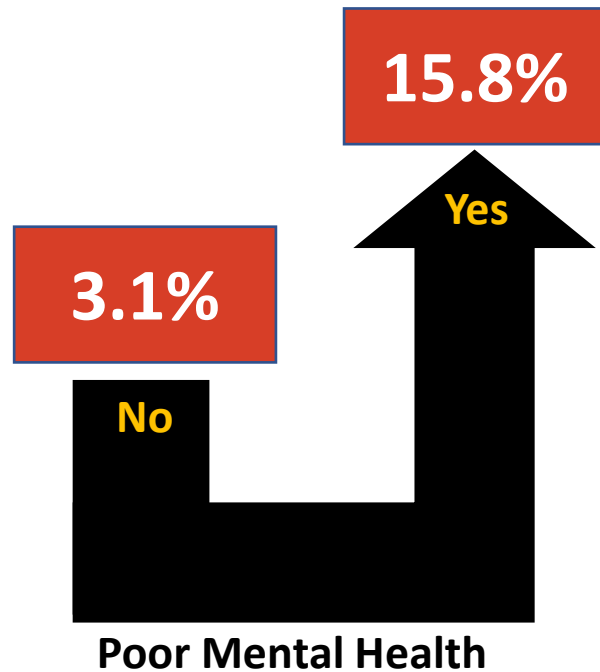


Poor Mental Health and ACEs



3+ ACEs and Mental Health Indicators

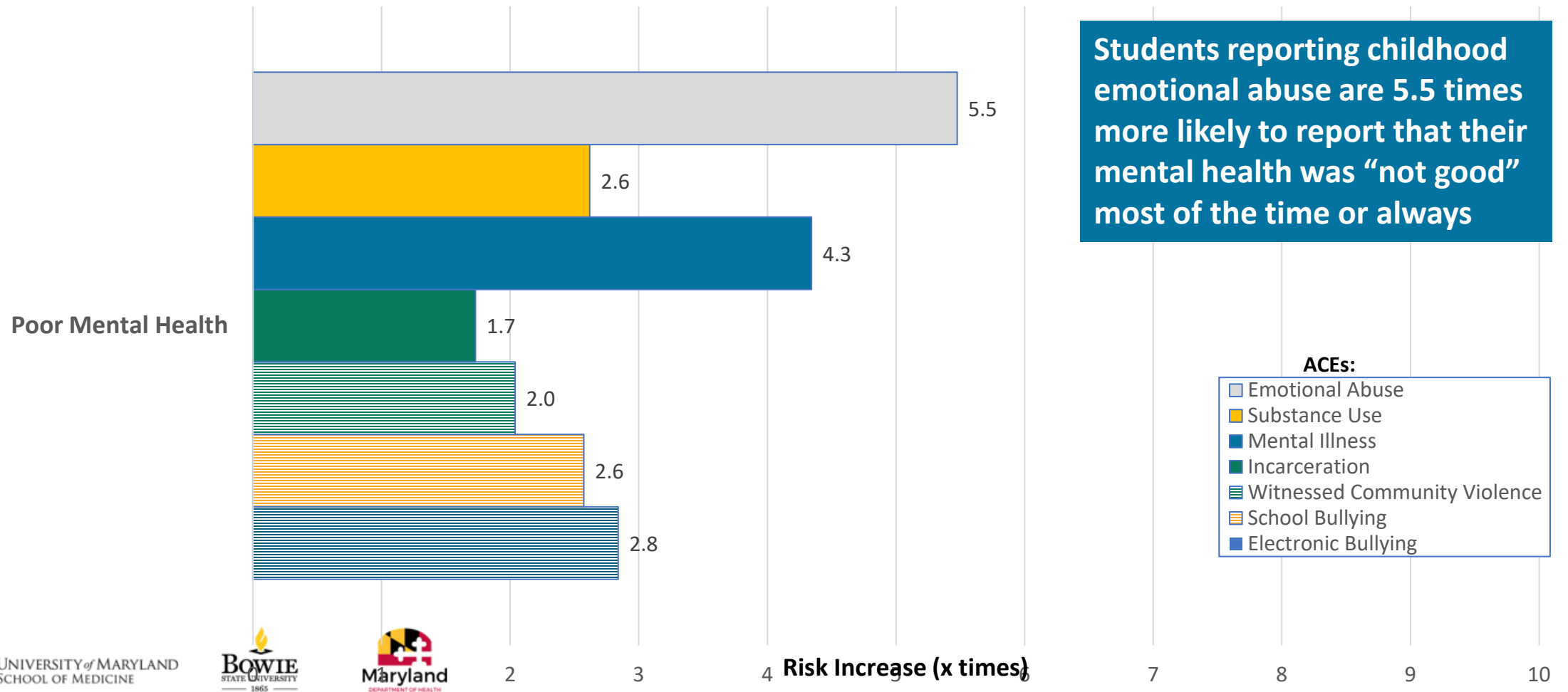
Individuals with 3+ ACEs are more likely to experience poor mental health



5.8 times more likely to report that their **mental health** was “not good” most of the time or always

Count of 5 of the original 8 ACE items available

ACEs associated with Increased Risk for Poor Mental Health

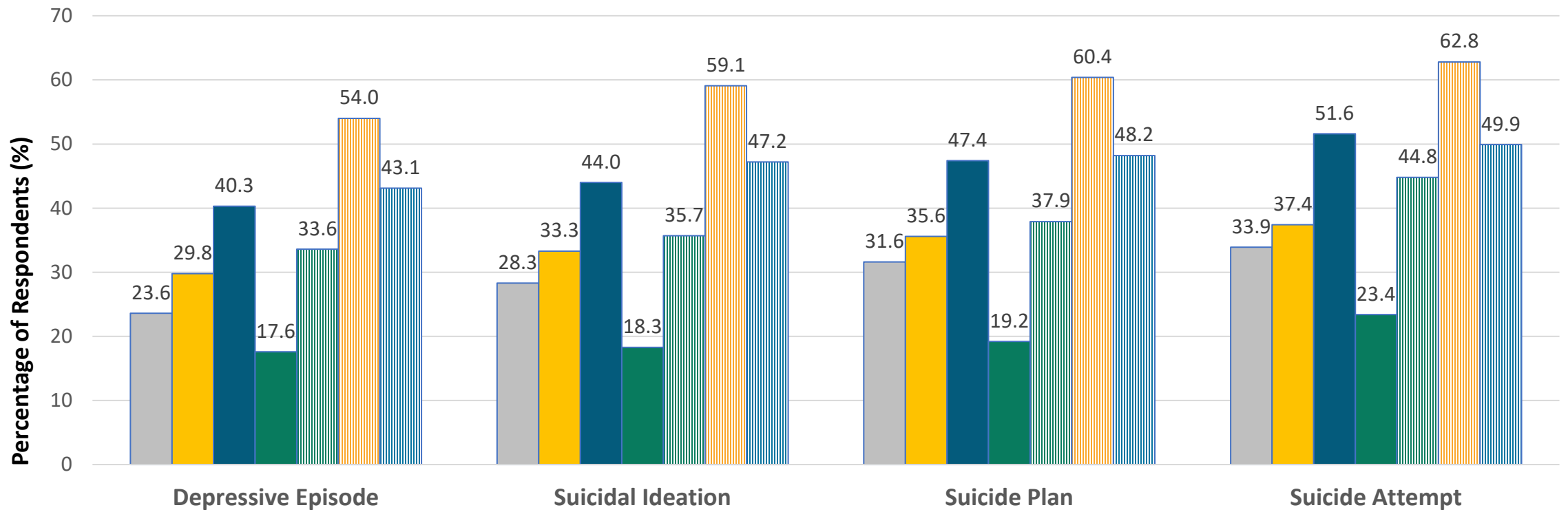


Students reporting childhood emotional abuse are 5.5 times more likely to report that their mental health was “not good” most of the time or always

ACEs:

- Emotional Abuse
- Substance Use
- Mental Illness
- Incarceration
- Witnessed Community Violence
- School Bullying
- Electronic Bullying

Mental Health Indicators and ACEs

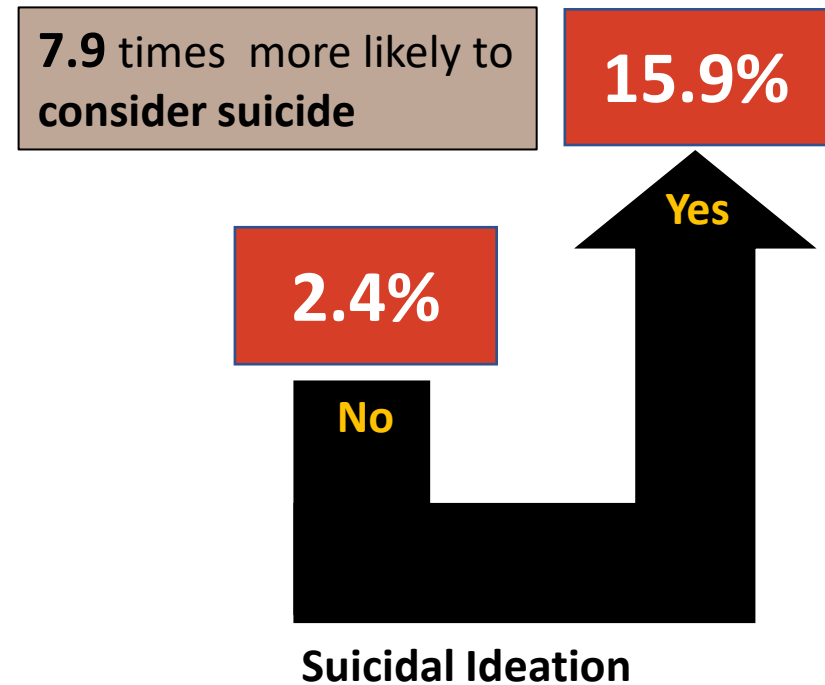
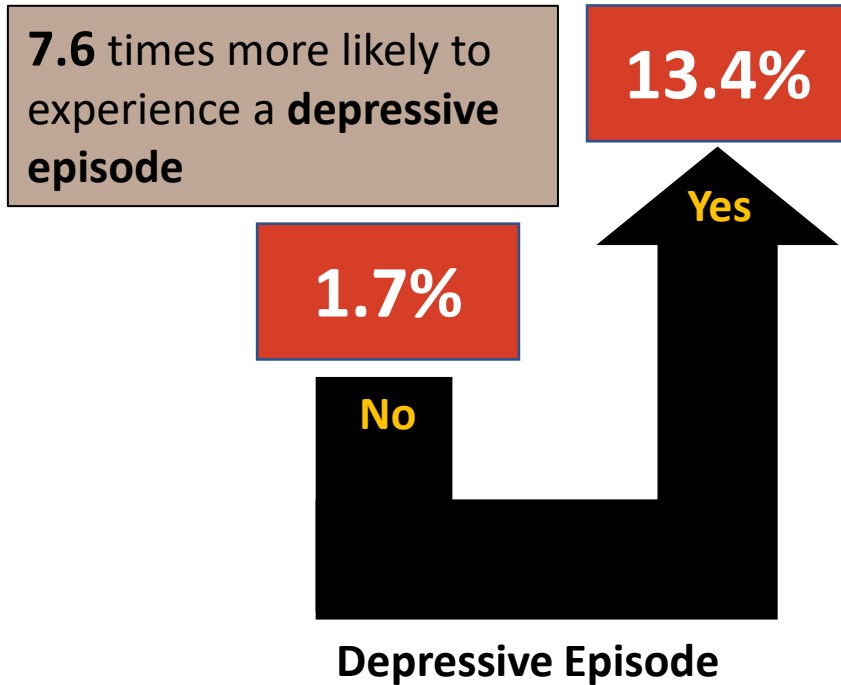


Mental Health Indicators

- ACEs:**
- Emotional Abuse
 - Substance Use
 - Mental Illness
 - Incarceration
 - Witnessed Community Violence
 - School Bullying
 - Electronic Bullying

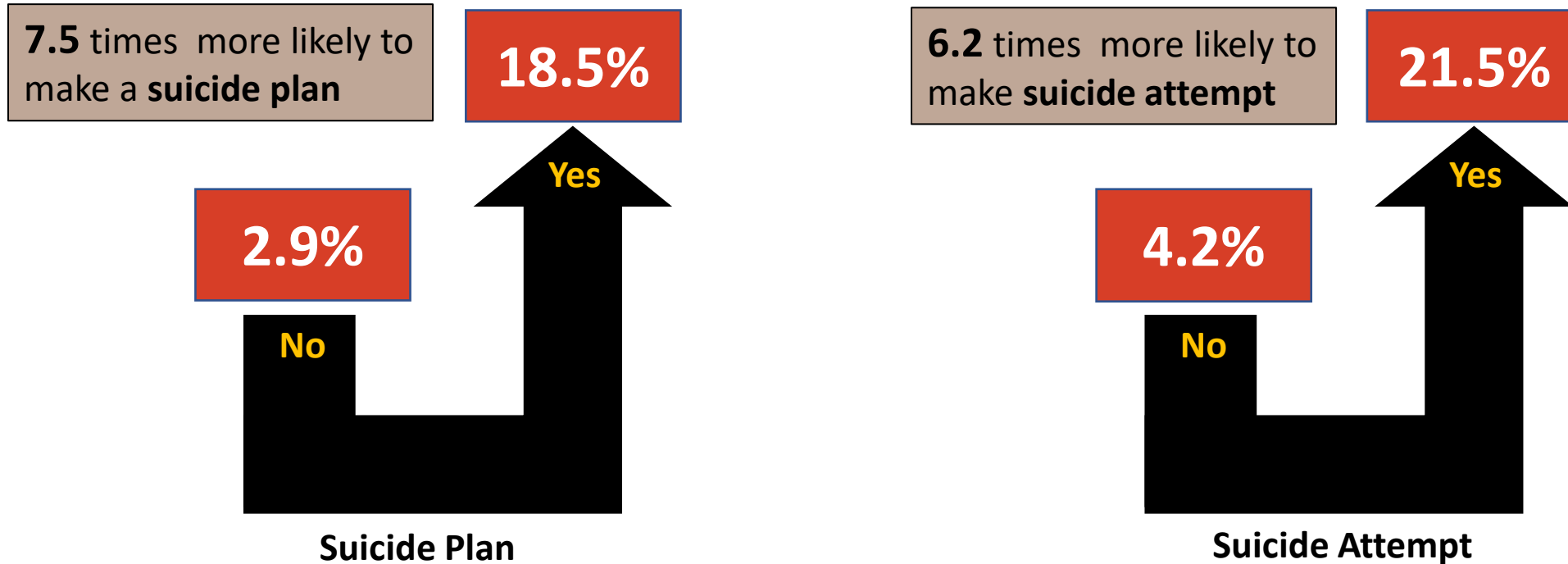
3+ ACEs and Mental Health Indicators

Individuals with 3+ ACEs are more likely to experience mental health difficulties

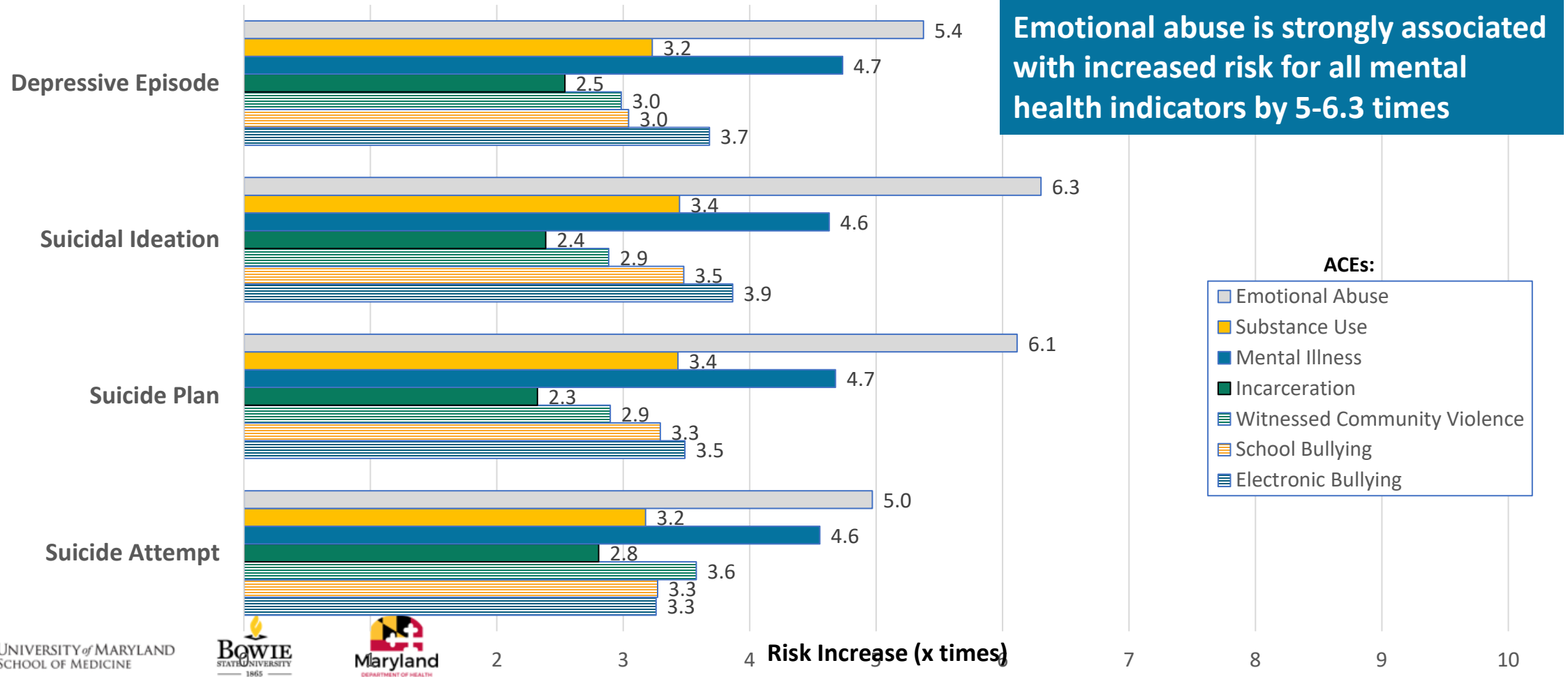


3+ ACEs and Mental Health Indicators

Individuals with 3+ ACEs are more likely to experience mental health difficulties



ACEs associated with Increased Risk for Mental Health Challenges



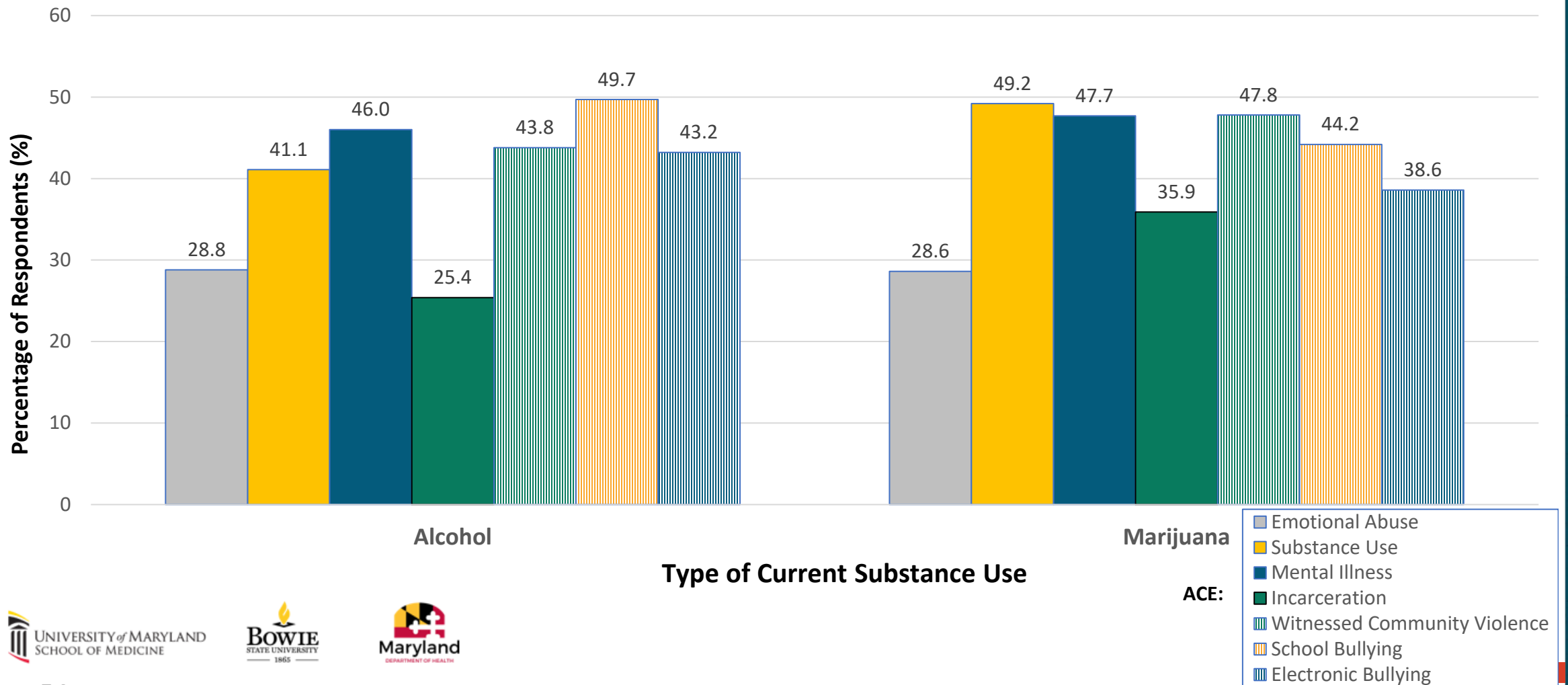


Building Healing Behavioral Health Systems:

Substance Use and
Adverse Childhood Experiences

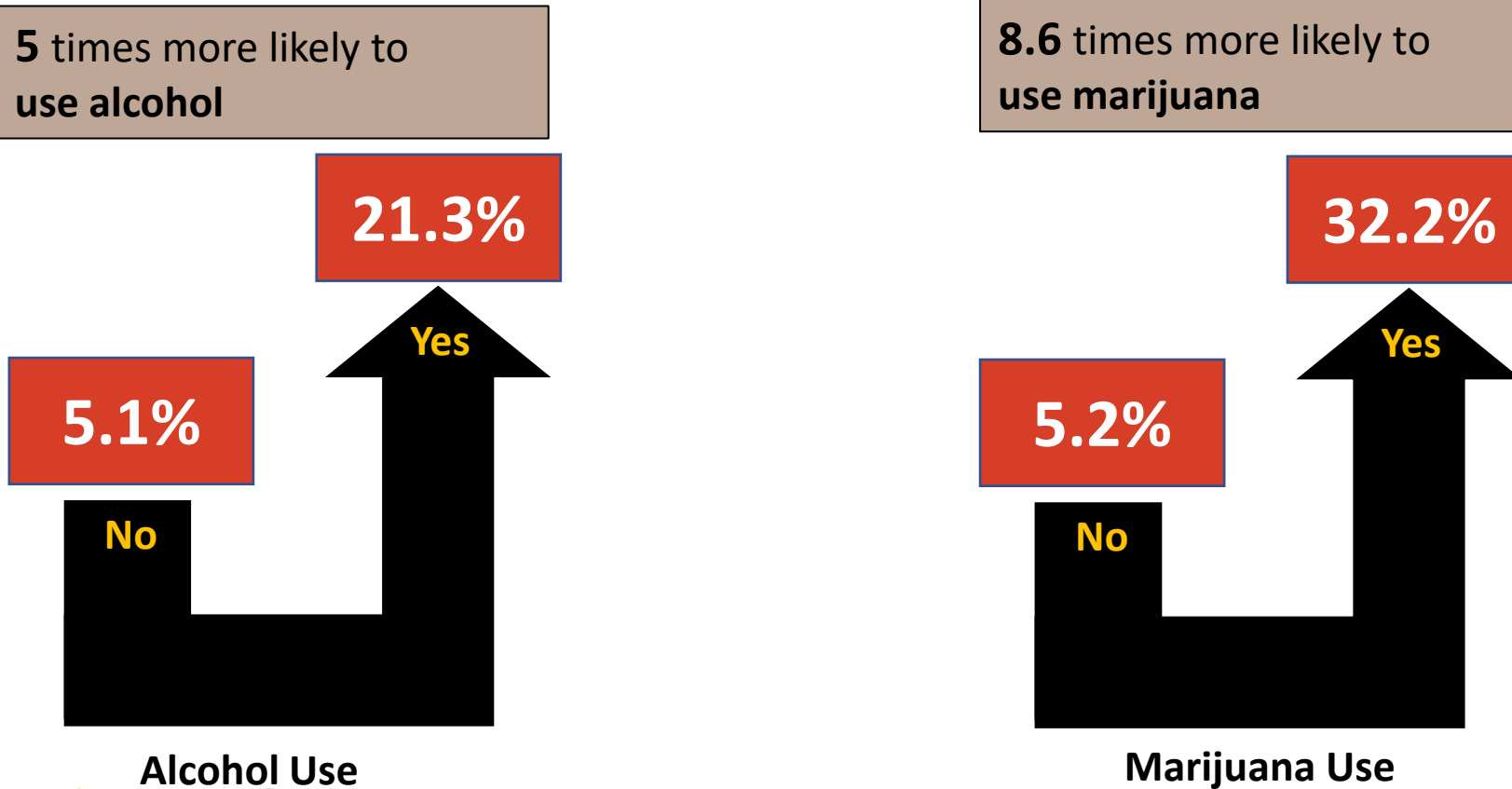


Current Substance Use and ACEs

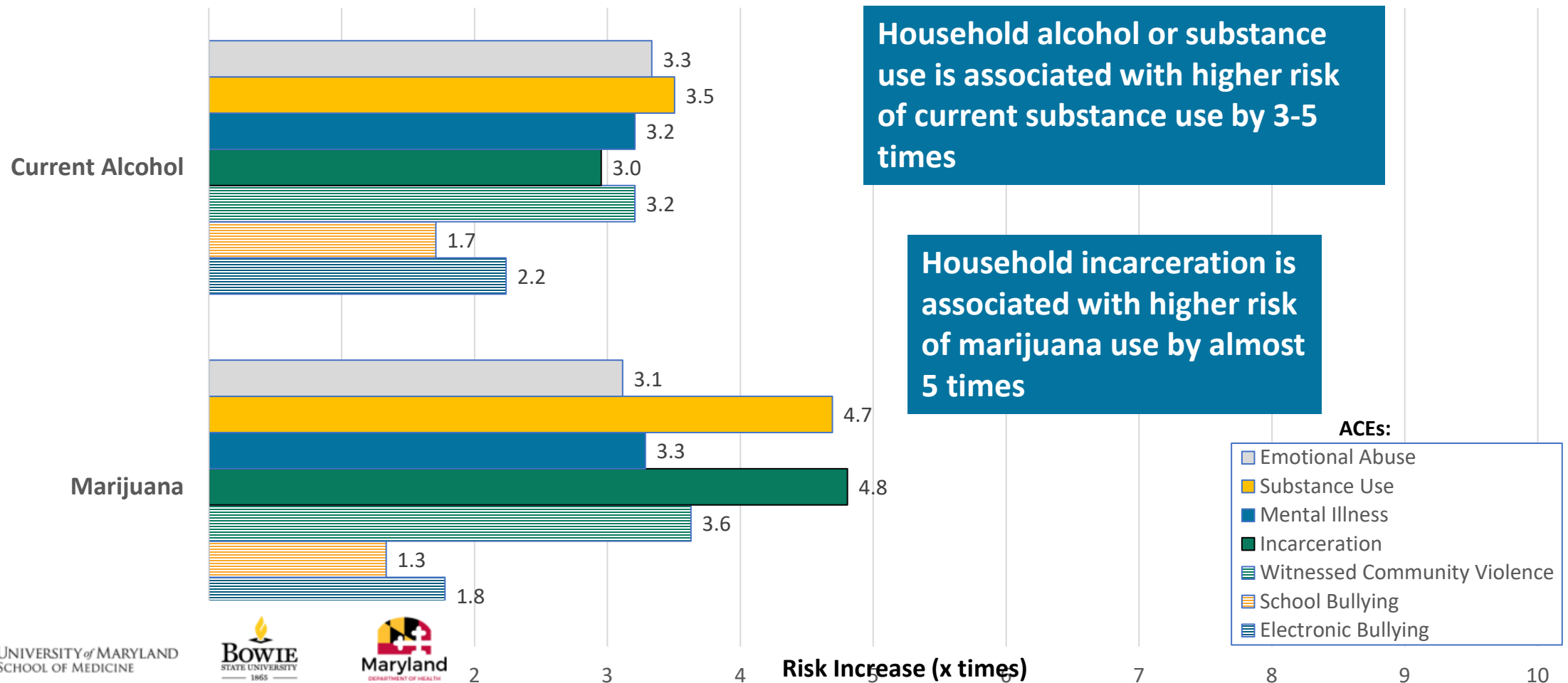


3+ ACEs and Current Substance Use

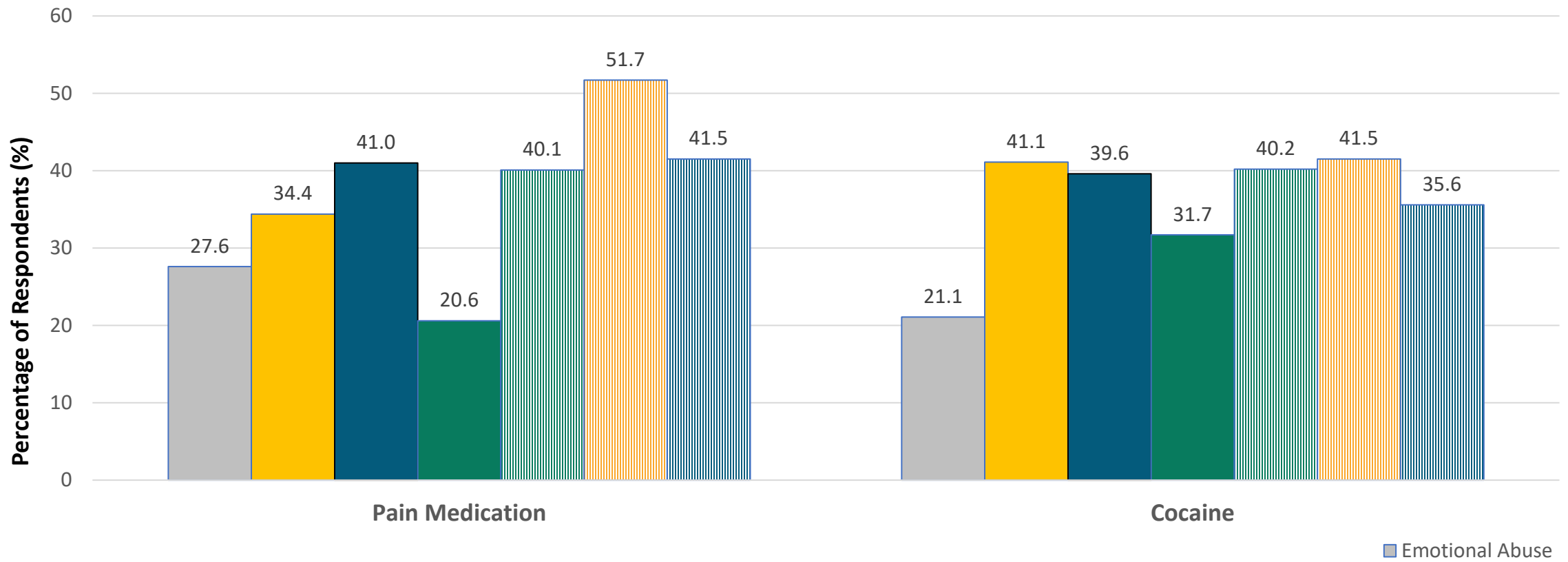
Individuals with 3+ ACEs are more likely to currently use substances



ACEs associated with Increased Risk for Current Substance Use



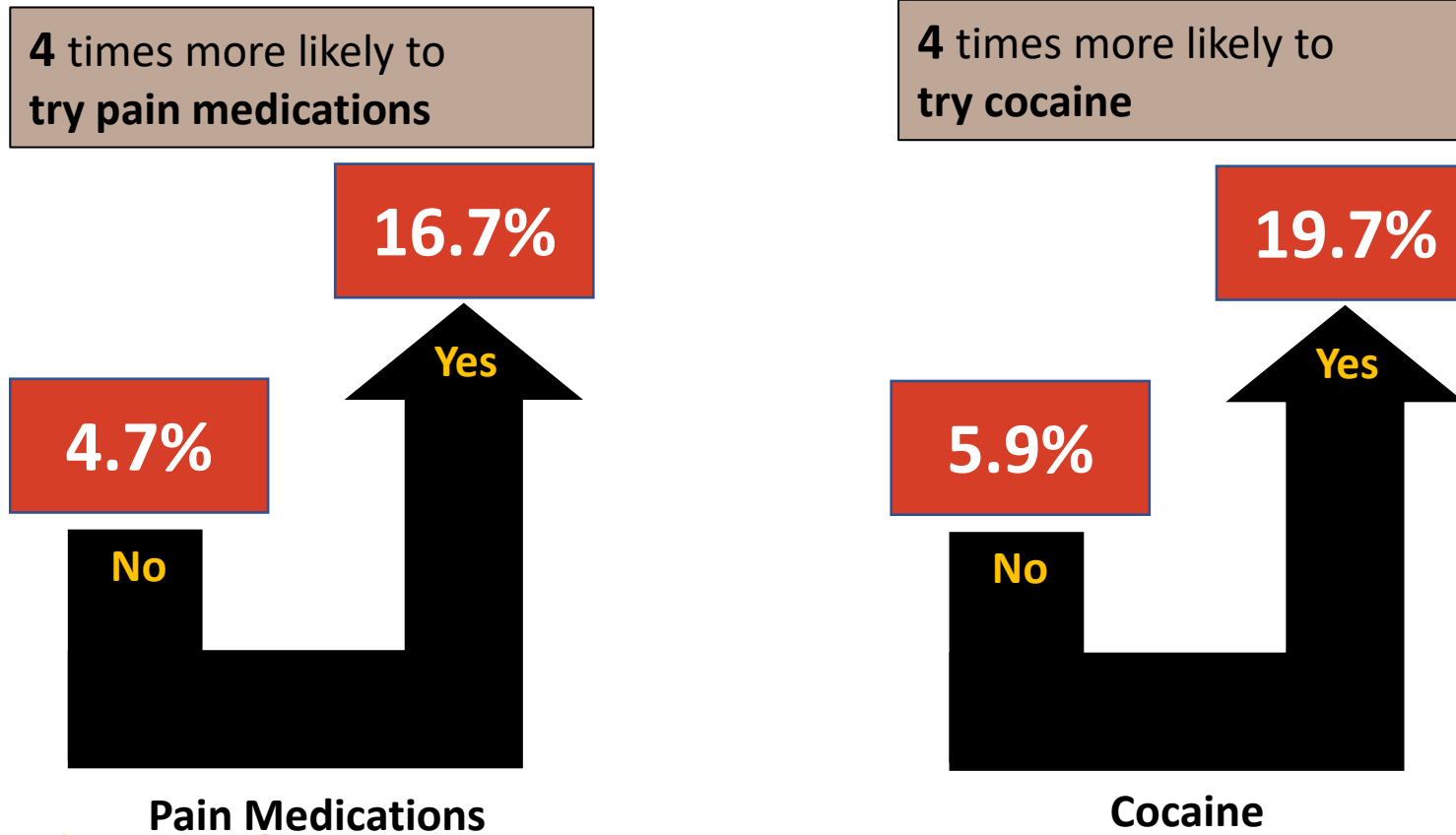
Illicit Substance Use (ever) and ACEs



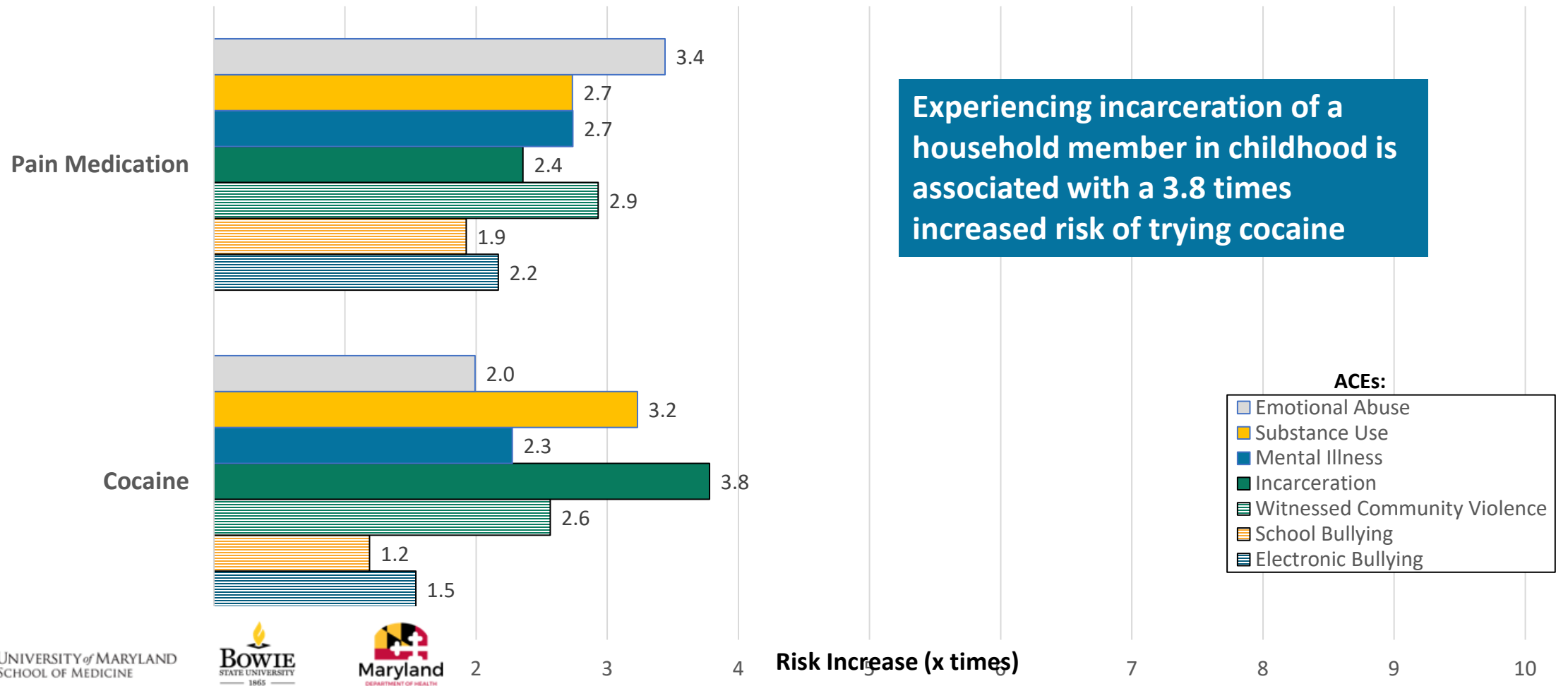
ACEs:

3+ ACEs and Illicit Substance Use (ever)

Individuals with 3+ ACEs are more likely to try illicit substances



ACEs associated with Increased Risk for Illicit Substance Use (ever)





Building Healing Behavioral Health Systems:

Summary of Behavioral Health Impact by ACE



Summary of Behavioral Health Impact by ACE: Emotional Abuse



12%
of students experienced
Emotional Abuse

Students who have experienced emotional abuse are **6.2 times** more likely to experience **Mental Health Challenges**



They are **5 times** more likely to **Attempt Suicide**



The Ability to Talk to an Adult outside of School is associated with decreased risk of emotional abuse for individuals with behavioral health challenges by

73%

Summary of Behavioral Health Impact by ACE: Household Substance Use



18%
of students live with
Household Substance Use

Students with household substance use are **4 times** more likely to experience **Both Substance Use and Mental Health Challenges**



They are also **4.7 times** more likely to **use marijuana**



Food Security decreases the impact of household substance use for individuals with behavioral health challenges by

47%

Summary of Behavioral Health Impact by ACE: Household Mental Illness



23%
of students live with
Household Mental Illness

Students with household mental illness are **5 times** more likely to experience **Mental Health Challenges**



They are also **4.6 times** more likely to **Make a Suicide Attempt**



The Ability to Talk to an Adult Outside of School and **Food Security** are associated with decreased risk of household mental illness for individuals with behavioral health challenges by about

32%

Summary of Behavioral Health Impact by ACE: Household Incarceration



11%
of students experience
Household Incarceration

Students with household incarceration are **3 times** more likely to experience **Both Substance Use and Mental Health Challenges**



They are **4.8 times** more likely to **use marijuana** and **3.8 times** more likely to **try cocaine**



Food Security is associated with decreased risk of household incarceration for individuals with behavioral health challenges by

58%

Summary of Behavioral Health Impact by ACE: Witnessed Community Violence



11%
of students have
**Witnessed Community
Violence**

Students who witness community violence are **4 times** more likely to experience **Both Mental Health and Substance use Challenges**



They are **3.6 times** more likely to **use marijuana**
and **2.9 times** more likely to **misuse pain medication**



Food Security is associated with decreased risk of witnessing community violence for individuals with behavioral health challenges by

54%

Summary of Behavioral Health Impact by ACE: School and Electronic Bullying



38%

of students experience
School Bullying



27%

of students experience
Electronic Bullying

Students who experience bullying are **3-4 times** more likely to experience **Mental Health Challenges**



They are **3.3 times** more likely to **Attempt Suicide**



The Ability to Talk to a Member of Their Family, and Food Security are associated with decreased risk of school bullying for individuals with behavioral health challenges by

28%



Building Healing Behavioral Health Systems:

Summary of Behavioral Health Findings



Summary of Findings

- More students with behavioral health challenges experience all ACEs than students without behavioral health challenges.
- Almost all relationships across ACEs, PCEs and behavioral health indicators were statistically significant, showing a strong relationship of the impact of ACEs and PCEs on behavioral health in middle school students.

Summary of Findings: PCEs and Behavioral Health

- Individuals experiencing behavioral health challenges have also experienced PCEs (49-75%).
- PCEs are associated with reducing risk of behavioral health challenges
 - Mental Health Challenges 45-67% reduction
 - Substance use (ever) 13-59% reduction
 - Both Mental Health and Substance Use Challenges 11-71% reduction

Summary of findings: Positive Childhood Experiences (PCEs) and ACEs

- The highest proportion of individuals experiencing PCEs also experienced School Bullying (47%-51%).
- PCEs are associated with reducing risk introduced by specific ACEs up to 73%.
- Household Emotional Abuse is the ACE most impacted by PCEs (73%), and Food Security is the PCE most impacting ACEs (21-58%).
- The Ability to Talk to an Adult Outside School and Being Comfortable Seeking Help from Adults beside Parents decreased the most risk for emotional abuse (73%).

Summary of findings: 3 or more ACEs

- Having three or more ACEs is associated with an increased risk of adverse behavioral health outcomes for
 - Mental Health Challenges at 9.5 times
 - Substance use (ever) at 5.3 times
 - Both Mental Health and Substance Use Challenges at 6.8 times
- Having three or more ACEs is associated with an increased risk of adverse mental health and substance use outcomes by up to 8.6 times.

Summary of findings: Mental Health Indicators and ACEs

- More individuals with Bullying reported experiencing all mental health indicators (School 54-63%; Electronic 43-50%) than any other ACE, followed by Household Mental Illness (40-52%).
- Specific ACEs are associated with increasing risk for mental health challenges by up to 6.3 times.
- Emotional Abuse was most often highly associated with poor mental health (5.5 times) followed by Household Mental Illness (4.3 times).
- Household Incarceration is least associated with increased mental health challenges (1.7-2.8).

Summary of findings: Current Substance Use and ACEs

- More individuals with School Bullying (44-50%) reported experiencing current substance use indicators than any other ACE, followed by Household Substance Use (41-49%).
- Specific ACEs are associated with increasing risk for current alcohol or marijuana use by up to 4.7 times.
- Household Substance Use is strongly associated with higher risk of students' current substance use for all substances by 3.5 – 4.7 times.
- Household Incarceration is most strongly associated with current marijuana use at 4.8 times.

Summary of findings:

Lifetime Pain Medication Misuse and ACEs

- Bullying (School 52%; Electronic 42%), Substance Use (40-59%), and Household Mental Illness (41%) were most frequently reported ACEs with pain medication misuse.
- Individuals with 3 or more ACEs are 4 times more likely to try pain medications without a prescription.
- Specific ACEs are associated with increasing risk for ever using other illicit substances by 1.9-3.4 times.
- Household Emotional Abuse is most strongly associated with trying non-prescribed pain medications at 3.4 times more likely.
- Witnessing Community Violence is also strongly associated with trying non-prescribed pain medication at 2.9 times more likely.

Summary of findings: Lifetime Cocaine Use and ACEs

- School Bullying (42%), Household Substance Use (41%) and Witnessing Community Violence (40%) were most frequently reported ACEs with other trying cocaine.
- Specific ACEs are associated with increasing risk for ever trying cocaine by 1.2-3.8 times.
- Incarceration of a Household Member is most strongly associated with higher risk of trying cocaine (3.8 times more likely), with Household Substance Use risk at 3.2 times more likely.



Building Healing Behavioral Health Systems:

Potential Action Steps



Potential Action Steps: Behavioral Health Organizations



- Facilitate behavioral health organization-level approaches to trauma informed care to mitigate the impact of ACEs on behavioral health.
- Develop a comprehensive approach to foster trauma informed organizational policies and practices in behavioral health. This would include activities such as:
 - Completing a Trauma Informed Organizational Assessment
 - Promoting screening for ACEs in high-risk groups and providing appropriate counseling and supports.

Potential Action Steps: Screening and Referral



- Implement appropriate screening and symptom assessment tools
 - Use screening tools that assess exposure to trauma as well as trauma symptoms.
 - Understanding symptoms will help facilitate appropriate treatment and referrals to behavioral health services.
- Discourage use of the ACEs questionnaire as a screening tool, because it does not collect:
 - information on the impact of ACE exposure on mental health symptoms, so it does not provide information on individuals' treatment needs.
 - the cumulative effect of a single ACE encountered repeatedly.

Potential Action Steps: Professional Support and Development



- Build a trauma informed workforce that is trained to promote positive well-being for the entire workforce.
- Provide training and professional development for public behavioral health workforce clinicians and administrators around ACEs and PCEs.

Potential Action Steps: Positive Childhood Experiences (PCEs)



- Disseminate what we know about PCEs to influence policies across systems to increase PCEs as a prevention strategy.
- Promote awareness on the impact of positive childhood experiences to mitigate ACEs.
- Develop resources for people providing direct services on how they can support families in creating opportunities for facilitating positive experiences.

Potential Action Steps: Beyond Behavioral Health Systems



- Address community social problems that contribute to ACEs.
- Incorporate interventions across a broad array of service organizations including behavioral health, educational system, domestic violence, child and adult protective services, community outreach organizations, and more.
- Explore how to incorporate effective interventions with agencies where these domains are under their purview.

Other items

- Community prevention approaches
 - Food security
 - Reducing community violence
- Education System
 - Bullying
- (look through presentation for more)

Potential Action Steps: Data to Action Toolkit



- Integrate this report into the Building Healing Behavioral Health Systems (BHBHS) Data-to-Action toolkit

<https://www.healingsystemsdata.org/>





Please contact us! :)

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References

Bethell, C., Jones, J., Gombojav, N., Linkenbach, J., & Sege, R. (2019). Positive Childhood Experiences and Adult Mental and Relational Health in a Statewide Sample. *JAMA Pediatrics* published online 2019 Sep 9. <https://doi.org/10.1001/jamapediatrics.2019.3007>

Bethell, C. D., Gombojav, N., & Whitaker, R. C. (2019). Family resilience and connection promote flourishing among US children, even amid adversity. *Health Affairs*, 38(5), 729-737.

Centers for Disease Control and Prevention (2019). Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.

Centers for Disease Control and Prevention (2019). CDC Vital Signs: Adverse Childhood Experiences (ACEs) Preventing early trauma to improve adult health. https://www.cdc.gov/violenceprevention/aces/resources.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fviolenceprevention%2Facestudy%2Fresources.html

Child and Adolescent Behavioral Health (2022). Positive Childhood Experiences. <https://www.childandadolescent.org/positive-childhood-experiences/>

Felitti, V. J., Anda, R. F., Nordenberg, D., Williamson, D. F., Spitz, A. M., Edwards, V., Koss, M. P., & Marks, J. S. (1998). Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults: The adverse childhood experiences (ace) study. *American Journal of Preventive Medicine*, 14(4), 245–258. DOI: [https://doi.org/10.1016/S0749-3797\(98\)00017-8](https://doi.org/10.1016/S0749-3797(98)00017-8)

Jallah, N., Harding, Y. (2022). Youth ACEs Status: Findings from the 2021 Youth Pandemic Behavior Survey (YPBS-21). BHA Monthly Data Meeting March 28, 2022.

Merrick, M., Ports, K., Ford, D., Afifi, T, Gershoff, E., Grogan-Kaylor, A. (2017). Unpacking the impact of adverse childhood experiences on adult mental health. *Journal of Child Abuse and Neglect*, 69(1), 10-19. doi: 10.1016/j.chiabu.2017.03.016

Oral, R., Ramirez, M., Coohy, C., Nakada, S., Walz, A., Kuntz, A., Benoit, J. Peek-Asa, C. (2016). Adverse childhood experiences and trauma informed care: the future of health care. *Journal of Pediatric Research* 79(2), 227-233.